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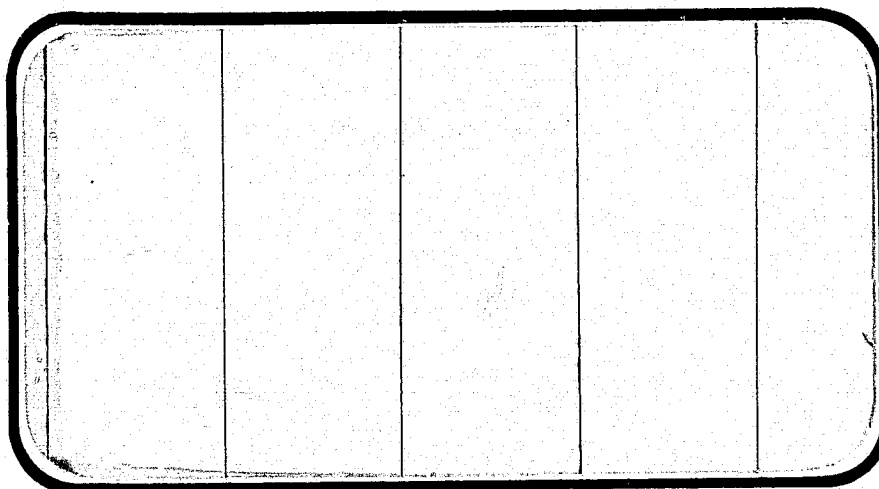
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# NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

NASA CR-

141838



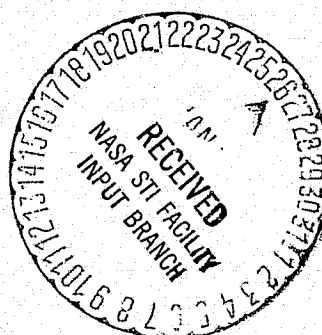
(NASA-CR-141838) RESULTS OF A PRESSURE  
LOADS INVESTIGATION ON A 0.030-SCALE MODEL  
(47-OTS) OF THE INTEGRATED SPACE SHUTTLE  
VEHICLE CONFIGURATION 5 IN THE NASA AMES  
RESEARCH CENTER 11 X 11 FOOT LEG OF THE

N76-15248

G3/18      Unclass  
09115

SPACE SHUTTLE

AEROTHERMODYNAMIC DATA REPORT



JOHNSON SPACE CENTER

HOUSTON, TEXAS

DATA MANAGEMENT services

SPACE DIVISION



CHRYSLER  
CORPORATION



DATE: June 1976

# PUBLICATION CHANGE

THE FOLLOWING CHANGES APPLY TO PUBLICATION: Space Shuttle Data Report

TITLE: RESULTS OF A PRESSURE LOADS INVESTIGATION ON A 0.030-SCALE MODEL

(47-OTS) OF THE INTEGRATED SPACE SHUTTLE VEHICLE CONFIGURATION 5 IN THE NASA

AMES RESEARCH CENTER 11x11 FOOT LEG OF THE UNITARY PLAN WIND TUNNEL (IA81A)

NUMBER: DMS-DR-2169 DATE: November 1975 BRANCH: DATAMAN

NASA CR-141,836, Volume 1 N76-15246  
NASA CR-141,837, Volume 2 N76-15247  
NASA CR-141,838, Volume 3 N76-15248  
NASA CR-141,839, Volume 4 N76-15249  
NASA CR-141,840, Volume 5 N76-15250  
NASA CR-141,841, Volume 6 N76-15251  
NASA CR-141,842, Volume 7 N76-15252

Subsequent to publication, the following errors were discovered in the documented pressure tap locations:

- 1) In table IV, the wing station corresponding to  $\eta = 0.673$  was erroneously stated as  $Y_0 = 300$  instead of  $Y_0 = 315$ .

(Continued on next page)

Prepared by: G. W. Klug, H. C. Zimmerle

Reviewed by: D. E. Poucher

Approved: J. L. Glynn  
J. L. Glynn, Manager  
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PAGE 1 OF 2

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June 1976

PUBLICATION CHANGE (Concluded)

DMS-DR-2169

- 2) In table IV and all plotted and tabulated left wing pressure data, tap locations given as  $\eta = 0.673$ ,  $x/c \geq 0.775$  should be  $\eta = 0.641$  at the same chordwise locations.
- 3) In table VI, spanwise tap locations given as  $\eta_v = 0.153, 0.316, 0.600, 0.840$ , should be  $0.158, 0.317, 0.602, 0.839$ , respectively.
- 4) In table VIII, the stated values of SRB axial coordinates  $X_s$  and  $X_s/l_s$  are erroneous for tap numbers 909-932; tap numbers 870, 882, and 901-908 were deleted from the test but erroneously included in the table.

This publication change presents tables IV, VI, and VIII as revised from the subject publication. Users of the tabulated or plotted pressure data for the left wing should refer to the revised table IV for the correct pressure tap locations.



TABLE IV.  
ORBITER WING PRESSURE TAP NUMBERS

$\eta$ $\gamma_c$		ORBITER LEFT WING PRESSURE TAP NUMBERS																NO. OF TAPS	
23	110	$\gamma_c$ 0 .041 .113 .247 .425 .547 .638 .727 .793																	
		TOP 208 209 210 211 212 213 214 215 216																9 9	
		BOT - - - - -																0	
24	140	$\gamma_c$ 0 .010 .022 .050 .094 .229 .362 .497 .700 .874 .865 .900 .965																	
		TOP 217 218 219 220 221 222 223 224 225 226 227 228 229																13 34	
		BOT - 230 231 232 233 234 235 236 237 238 239 240 241																12	
24	170	$\gamma_c$ 0 .010 .020 .040 .086 .163 .246 .340 .437 .545 .639 .719 .819 .955																	
		TOP 242 243 244 245 246 247 248 249 250 251 252 253 254 255																14 61	
		BOT - 256 257 258 259 260 261 262 263 264 265 266 267 268																13	
24	200	$\gamma_c$ 0 .010 .020 .040 .093 .171 .274 .402 .545 .700 .808 .857 .905 .953 .962																	
		TOP 269 270 271 272 273 274 275 276 277 278 279 280 281 282 -																14 89	
		BOT - 283 284 285 286 287 288 289 290 291 292 293 294 295 296																14	
24	230	$\gamma_c$ 0 .010 .020 .050 .080 .150 .250 .400 .550 .725 .775 .850 .900 .950																	
		TOP 297 298 299 300 301 302 303 304 305 306 307 308 309 310																14 116	
		BOT - 311 312 313 314 315 316 317 318 319 320 321 322 323																13	
24	300	$\gamma_c$ .775 .850 .900 .950																	
		TOP 324 325 326 327 328 329 330 331 332																9 140	
		BOT - 336 337 338 339 340 341 342 343																8	
24	315	$\gamma_c$ 0 .010 .020 .050 .150 .250 .400 .550 .750 .850 .950																	
		TOP 344 345 346 347																3 123	
		BOT 344 345 346 347																4	
24	355	$\gamma_c$ 0 .010 .020 .050 .150 .250 .400 .550 .750 .850 .950																	
		TOP 344 345 346 347 348 349 350 351 352 353 354 355 356 357																10 159	
		BOT - 358 359 360 361 362 363 364 365 366																9	
24	405	$\gamma_c$ 0 .010 .020 .050 .150 .250 .400 .550 .750 .850 .950																	
		TOP 367 368 369 370 371 372 373 374 375 376 -																10 179	
		BOT - 377 378 379 380 381 382 383 384 385 386																10	
24	455	$\gamma_c$ 0 .020 .049 .157 .345 .503 .670 .862																	
		TOP 387 388 389 390 391 392 393 394																8 194	
		BOT - 395 396 397 398 399 400 401																7	
24	505	$\gamma_c$ 0 .020 .049 .157 .345 .503 .670 .862																	
		TOP 402 403																2 196	
		BOT - -																	

ORBITER RIGHT WING PRESSURE TAP NUMBERS

$\eta$ $\gamma_c$		ORBITER RIGHT WING PRESSURE TAP NUMBERS																NO. OF TAPS	
235	110	$\gamma_c$ 0 .041 .113 .247 .425 .547 .638 .727 .793																	
		TOP 404 405 406 407 408 409 410 411 412																9 205	
		BOT - - - - -																0	
344	170	$\gamma_c$ 0 .010 .020 .050 .086 .163 .246 .340 .437 .545 .639 .719 .819 .955																	
		TOP 413 414 415 416 - 417 418 419 420 421																9 222	
		BOT - 422 423 424 425 426 427 428 - 429																8	



WEN FIVE LOC. - 25-

TABLE V. ORBITER FUSELAGE PRESSURE TAP NUMBERS

ORBITER X <sub>0</sub> ~ IN.			Φ RADIAL LOCATION ~ DEGREES																									
FULL	MODEL	X <sub>0</sub> /L	0	20	40	55	70	90	105	110	120	135	140	150	151	156	162	165	169	174	180	305	320	340	NO TAPS	Σ TAPS		
235	7.05	0	7																						1	1		
245	7.35	.008	8					9													10				3	4		
265	7.95	.023	11	12	13	14	15	16			17			18							19	20	21	22	12	16		
295	8.85	.046	23	24	25	26	27	28			29			30							31	32	33	34	12	28		
325	9.75	.070	35	36	37	38	39	40			41			42							43	44	45	46	12	40		
380	11.40	.112	47	48	49	50	51	52			53			54							55	56	57	58	12	52		
440	13.20	.158																		59					1	53		
450	13.50	.166	60	61	62	63	64	65			66					67			68		69	70	71	72	13	66		
465	13.95	.177													73		74								2	68		
500	15.00	.204	75	76	77	78	79	80			81		82	83				84			85	86	87	88	14	82		
560	16.80	.251	89		90		91	92			93			94				95			96		97		9	91		
625	18.75	.301	98		99		100	101			102			103				104			105		106		9	100		
725	21.75	.378	107		108		109	110			111			112				113			114		115		9	109		
880	26.40	.497	116		117		118	119			120			121				122			123		124		9	118		
980	29.40	.574	125		126																		127		3	121		
1080	32.40	.652	128		129		130	131			132			133				134			135		136		9	130		
1180	35.40	.729	137		138		139	140			141			142							143		144		8	138		
1245	37.35	.779	145		146		147	148	149		150	151		152				153			154		155		11	149		
1300	39.00	.821	156		157		158	159	160		161	162		163							164		165		10	159		
1375	41.25	.879	166		167		168	169	170		171	172		173				174					175		10	169		
1430	42.30	.921	176		177		178	179	180		181	182		183				184					185		10	179		
1480	44.40	.960	186		187		188	189	190		191	192		193				194					195		10	189		
1530	45.30	.999									196	197													2	191		
1530	45.30	.999									198	199													2	193		

L = 1297.0 IN

- a. OMS POD INSIDE  
b. OMS POD OUTSIDE

TABLE VI. ORBITER VERTICAL TAIL PRESSURE TAP  
NUMBERS (LEFT SIDE ONLY)

VERTICAL			X/CV											
Z <sub>0</sub>	FULL SCALE	MODEL SCALE	$\eta_v$	0	.025	.05	.15	.30	.52	.685	.775	.90	No. TAPS	TAPS
550		16.5	.158	430	431	432	433	434	435	436	437		8	8
600		18.0	.317	438	439	440	441	442	443	444	445	446	9	17
690		20.7	.602	447	448	449	450	451	452	453	454	455	9	26
765		22.95	.839	456	457	458	459	460	461	462	463	464	9	35
792		23.76	.925	465	466	467	468	469	470	471	472	473	9	44



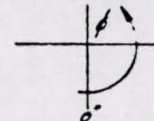
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Xp ~ IN. REL SCALE	Xp ~ IN. MODEL SCALE	XT/ LT	φ ~ DEGREES																NO TAPS
			0	30	60	90	120	135	147	162	180	198	213	225	240	270	300	330	
298/329	5.937/6.21	0	474																1
346	10.38	0.0692	475	476	477	478	479		480		481		482		483	484	485	486	12
363	10.89	0.0184	487	488	489	490	491	492	493	494	495	496	497	498	499	500	501	502	16
403	12.09	0.0400	503	504	505	506	507	508	509	510	511	512	513	514	515	516	517	518	16
448	13.44	0.0644	519	520	521	522	523	524	525	526	527	528	529	530	531	532	533	534	16
568	17.04	0.1292	535	536	537	538	539	540	541	542	543	544	545	546	547	548	549	550	16
628	20.64	0.1944	551	552	553	554	555	556	557	558	559	560	561	562	563	564	565	566	16
716	21.54	0.2106	567	568	569	570	571	572	573	574	575	576	577	578	579	580	581	582	16
758	22.74	0.2323	583	584	585	586	587	588	589	590	591	592	593	594	595	596	597	598	16
803	24.24	0.2594	599	600	601	602	603	604	605	606	607	608	609	610	611	612	613	614	16
850	25.50	0.2821	615	616	617	618	619	620	621	622	623	624	625	626	627	628	629	630	16
950	28.50	0.3362	631	632	633	634	635	636	637	638	639	640	641	642	643	644	645	646	16
1050	31.50	0.3904	647	648	649	650	651	652	653	654	655	656	657	658	659	660	661	--	16
1150	34.50	0.4445	663	664	665	666	667	668	669	670	671	672	673	674	675	676	677	678	16
1250	37.50	0.4957	679	680	681	682	683	684	685	686	687	688	689	690	691	692	693	694	16
1350	40.50	0.5528	695	696	697	698	699	700	701	702	703	704	705	706	707	708	709	710	16
1500	45.00	0.6360	711	712	713	714	715	716	717	718	719	720	721	722	723	724	725	726	16
1700	51.00	0.7423	727	728	729	730	731	732	733	734	735	736	737	738	739	740	741	742	16
1900	57.00	0.8506	743	744	745	746	747	748	749	750	751	752	753	754	755	756	757	758	16
2040	61.20	0.9264	759	760	761	762	763	764	765	766	767	768	769	770	771	772	773	774	16
2146	64.38	0.9838	775	776	777	778	779		780		781		782		783	784	785	786	12
STING CAVITY			787																1
1 = 1A46.91 IN.																		2 TAPS	314



TABLE VIII LEFT SRB PRESSURE TAP NUMBERS

VIEW FWD LOOKING AFT



$X_3$ IN. FULL SCALE	$X_3$ IN. MODEL SCALE	$X_3/L_3$	$\phi$ IN DEGREES										NO. TAPS	Σ NO TAPS
			0	45	90	135	180	225	270	315				
200	6	0	788										1	1
260	7.8	0.0235	789	790	791	792	793	794	795	796			8	9
370	11.1	0.0950	797	798	799	800	801	802	803	804			8	17
400	12.0	0.1118	805	806	807	808	809	810	811	812			8	25
450	13.5	0.1397	813	814	815	816	817	818	819	820			8	33
550	16.5	0.1956	821	822	823	824	825	826	827	828			8	41
700	21.0	0.2794	829	830	831	832	833	834	835	836			8	49
850	25.5	0.3632	837	838	839	840	841	842	843	844			8	57
1050	31.5	0.4250	845	846	847	848	849	850	851	852			8	65
1250	37.5	0.5867	853	854	855	856	857	858	859	860			8	73
1450	43.5	0.6985	861	862	863	864	865	866	867	868			8	81
* 1503	45.09	0.7280	869				871		872				3	84
* 1505	45.15	0.7290	873		874		875		876				4	88
* 1517	45.51	0.7360	877		878		879		880				4	92
* 1519	45.57	0.737	881				883		884				3	95
1650	49.5	0.8102	885	886	887	888	889	890	891	892			8	103
1750	52.5	0.8661	893	894	895	896	897	898	899	900			8	111
* 1832.9	54.99	0.9120	909		910		911		912				4	115
* 1833.9	55.02	0.9130	913		914		915		916				4	119
1872.2	56.17	0.9344	917	918	919	920	921	922	923	924			8	127
1911.7	57.35	0.9565	925	926	927	928	929	930	931	932			8	135
SKIRT BASE			933			934			935				3	138
NOZZLE BASE &			936										1	139

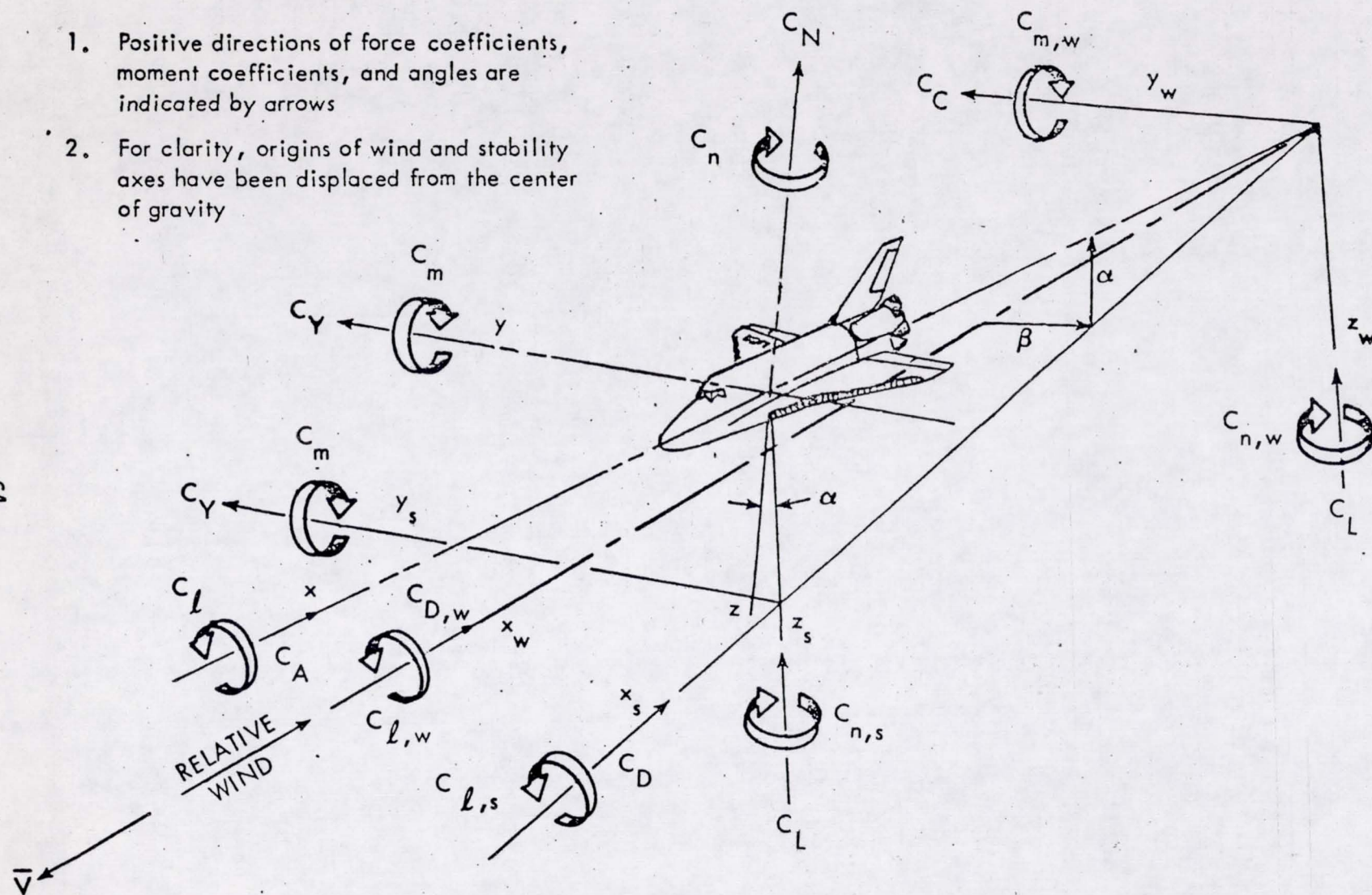
 $L_3 = 1789.60$  IN.

\* PRESSURE TAPS AT 77.5 IN. RADIUS ON THE STRUCTURAL RINGS



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1. Positive directions of force coefficients, moment coefficients, and angles are indicated by arrows
2. For clarity, origins of wind and stability axes have been displaced from the center of gravity



a. Forces and Moments  
Figure 1. - Axis Systems.



DATE: November 1976

# PUBLICATION CHANGE

THE FOLLOWING CHANGES APPLY TO PUBLICATION: Space Shuttle Data Reports

TITLE: RESULTS OF A PRESSURE LOADS INVESTIGATION ON A 0.030-SCALE MODEL  
(47-OTS) OF THE INTEGRATED SPACE SHUTTLE VEHICLE CONFIGURATION 5 IN THE NASA  
AMES RESEARCH CENTER 11x11 FOOT LEG OF THE UNITARY PLAN WIND TUNNEL (IA81A)

NUMBER: DMS-DR-2169 DATE: November 1975 BRANCH: DATAMAN

NASA CR-141,836, Volume 1  
NASA CR-141,837, Volume 2  
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NASA CR-141,839, Volume 4  
NASA CR-141,840, Volume 5  
NASA CR-141,841, Volume 6  
NASA CR-141,842, Volume 7

Subsequent to publication of the test data report, it was discovered that the correct SRB base area was 236.46 ft<sup>2</sup>. Initial data reduction done at the test facility was performed using a value of 201.07 ft<sup>2</sup> as presented in the pre-test report.

This publication change presents corrected test data in the form of plotted data figures, tabulated listings and text information as presented in the data report. Additionally, CAB and CAC coefficients have been added for all balances. This publication change replaces all the force test data contained in Volumes 1 and 2.

Equations used to correct the CAB, CAF and CYNF coefficients are as follows:

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PAGE 1 OF 2

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DATE:

# PUBLICATION CHANGE

THE FOLLOWING CHANGES APPLY TO PUBLICATION: Space Shuttle Data Reports

TITLE: \_\_\_\_\_

NUMBER: DMS-DR-2169 DATE: November 1975 BRANCH: DATAMAN

$$CAB_{new} = CAB_{old} * 236.46/201.07$$

$$CAF_{new} = CA - CAC - CAB_{new}$$

$$CYNF_{new} = CYNF_{old} - (CAF_{new} - CAF_{old}) * 250.5/1297.0$$

A complete list of data and page replacements follows.

All Volumes:

Page 26 AbsRB was listed as 201.07, should be 236.46.

Page 55 Max cross-sectional area listed as 201.07 full scale and 0.1809 model scale, should be 236.46 and 0.2128, respectively

Volume 1:

Data Figures 4-51, pages 1-843 replaced.

Volume 2:

Force data tabulation completely replaced, pages 1-113.

PAGE 2 OF 2

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# DATA REDUCTION (Continued)

$$C_{A_{b_{SRB}}} = -C_{P_{b_{SRB}}} \frac{A_{b_{SRB}}}{S}$$

$$C_{m_{b_o}} = - \frac{x_{b_o}}{l_b} C_{N_{b_o}} + \frac{z_{b_o}}{l_b} C_{A_{b_o}}$$

$$C_{m_{bf}} = - \frac{x_{bf}}{l_b} C_{N_{bf}}$$

$$C_{N_{f_o}} = C_{N_o} - C_{N_{b_o}} - C_{N_{bf}}$$

$$C_{m_{f_o}} = C_{m_o} - C_{m_{b_o}} - C_{m_{bf}}$$

$$C_{A_{f_o}} = C_{A_o} - C_{A_{b_o}}$$

$$C_{A_{f_{ET}}} = C_{A_{ET}} - C_{A_{b_{ET}}}$$

$$C_{A_{f_{SRB}}} = C_{A_{SRB}} - C_{A_{b_{SRB}}}$$

$$A_{b_{ET}} = 597.56 \text{ ft}^2$$

$$A_{bf} = 142.6 \text{ ft}^2$$

$$A_{b_o} = 314.10 \text{ ft}^2$$

$$A_{b_{OMS}} = 122.57 \text{ ft}^2$$



#### DATA REDUCTION (Concluded)

$$A_{bSRB} = 236.46 \text{ ft}^2$$

$$i_{b_0} = 14.75^\circ$$

$$x_{bf} = 1329.7 \text{ in.}$$

$$x_{b_0} = 1263.0 \text{ in.}$$

$$z_{b_0} = 336.5 \text{ in.}$$

Base pressure coefficients represented the average pressure on the respective bases. Body flap pressure coefficients were as given by figure 20.

Right SRB forces and moments were calculated as a mirror image of left SRB forces and moments about  $\beta = 0$ :

$$\left( \begin{array}{l} \text{Coefficient on} \\ \text{Right SRB} \\ \text{at } +\beta \end{array} \right) = \left( \begin{array}{l} \text{Coefficient on} \\ \text{Left SRB} \\ \text{at } -\beta \end{array} \right)$$

Forces and moment on each component (Orbiter, ET, left SRB, and right SRB) were interpolated versus the respective angle of attack and angle of sideslip of each component to nominal angles. These data were then added to provide total integrated vehicle forces and moments.

TABLE III. - MODEL DIMENSIONAL DATA - Continued.

MODEL COMPONENT : BOOSTER SOLID ROCKET MOTOR - S21GENERAL DESCRIPTION : \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_MODEL SCALE: 0.030.DRAWING NUMBER : VL72-000143D, VL77-000066

<u>DIMENSIONS :</u>	<u>FULL SCALE</u>	<u>MODEL SCALE</u>
Length (Includes nozzle), In.	<u>1789.40</u>	<u>53.682</u>
Tank Diameter, In.	<u>146.00</u>	<u>4.38</u>
Aft shroud dia., In.	<u>192.00</u>	<u>5.76</u>
Fineness Ratio	<u>9.3198</u>	<u>9.3198</u>
Area - Ft <sup>2</sup>		
Max Cross-Sectional	<u>236.46</u>	<u>0.2128</u>
Planform	_____	_____
Wetted	_____	_____
Base	_____	_____
WP of BSRM centerline ( $Z_T$ )	<u>400.0</u>	<u>1.200</u>
FS of BSRM nose ( $X_T$ )	<u>743.0</u>	<u>22.29</u>
BP of BSRM centerline ( $Y_T$ )	<u>250.5</u>	<u>7.515</u>

TABLE III. - MODEL DIMENSIONAL DATA - Continued.

MODEL COMPONENT: EXTERNAL TANK - T<sub>20</sub>

GENERAL DESCRIPTION: \_\_\_\_\_

NOTE: (Dimensions are to tank structural OML, TBS not included.)

MODEL SCALE: 0.030 .

DRAWING NUMBER VL72-000143D, VL78-000063

<u>DIMENSION:</u>	<u>FULL SCALE</u>	<u>MODEL SCALE</u>
Length , In.	<u>1844.275</u>	<u>55.328</u>
Max <del>Width</del> Dia., In.	<u>331.00</u>	<u>9.93</u>
Max Depth	<u>          </u>	<u>          </u>
Fineness Ratio	<u>5.687</u>	<u>5.687</u>
Area - Ft <sup>2</sup>		
Max Cross-Sectional	<u>594.678</u>	<u>0.053</u>
Planform	<u>          </u>	<u>          </u>
Wetted	<u>          </u>	<u>          </u>
Base	<u>          </u>	<u>          </u>

November, 1975

DMS-DR-2169  
NASA CR-141,838

RESULTS OF A PRESSURE LOADS INVESTIGATION ON A  
0.030-SCALE MODEL (47-OTS) OF THE INTEGRATED  
SPACE SHUTTLE VEHICLE CONFIGURATION 5 IN THE  
NASA AMES RESEARCH CENTER 11 X 11 FOOT LEG OF THE  
UNITARY PLAN WIND TUNNEL (IA81A)

VOLUME 3 OF 7

by

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Shuttle Aero Sciences  
Rockwell International Space Division

Prepared under NASA Contract Number NAS9-13247

by

Data Management Services  
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New Orleans, La. 70189

for

Engineering Analysis Division  
Johnson Space Center  
National Aeronautics and Space Administration  
Houston, Texas

WIND TUNNEL TEST SPECIFICS:

Test Number: ARC 11-019-1  
NASA Series Number: IA81A  
Model Number: 47-OTS  
Test Dates: 26 July through 8 August 1974  
Occupancy Hours: 184

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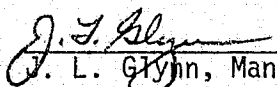
Phone: (415) 965-6258

DATA MANAGEMENT SERVICES:

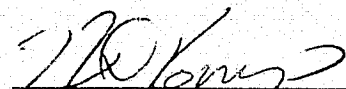
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Chrysler Corporation Space Division assumes no responsibility for the data presented other than display characteristics.



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THE UNITARY PLAN WIND TUNNEL (IA81A)

by

E. Chee, Rockwell International Space Division

ABSTRACT

Results of wind tunnel test IA81A are presented. The model was a 0.030-scale representation of the integrated Space Shuttle Vehicle Configuration 5. Testing was conducted in the NASA Ames Research Center 11 x 11 foot leg of the Unitary Plan Wind Tunnel to investigate pressure distributions for aeroloads analyses at Mach numbers from 0.9 through 1.4. Angles of attack and sideslip were varied from -6 to +6 degrees.

This report consists of 7 volumes of force and pressure data. They are arranged in the following manner:

Volume No.	Contents
1	IA81A Plotted Force Data
2	IA81A Tabulated Force Data IA81A Plotted Pressure Data
3	IA81A Tabulated Pressure Data
	(a) orbiter fuselage pages 1-447
	(b) left vertical tail surface pages 448-615

ABSTRACT (Concluded)

Volume No.	Contents	
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6	IA81A Tabulated Pressure Data	
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CNF versus CLMF
- B) CY, CYNF, CBL versus BETA I  
CY versus CYNF  
CY versus CBL
- C) CHEO, CHEI versus ALPHA O
- D) CABO versus ALPHA O
- E) CABET versus ALPHA T
- F) CABSRB versus ALPHA L
- G) CABSRB versus ALPHA R
- H) CAFAFO versus MACH
- I) XAC/LV versus MACH
- J) CNALFA versus MACH
- K) YAC/LV versus MACH
- L) CYBETA versus MACH
- M) CHEO, CHEI versus MACH
- N) DCAF, DCNF, DCLMF versus MACH
- O) CP versus X/LB
- P) CP versus X/LT
- Q) CP versus X/LS
- R) CP versus X/CV
- S) CP versus X/CW

NOMENCLATURE  
General

<u>SYMBOL</u>	<u>PLOT SYMBOL</u>	<u>DEFINITION</u>
a		speed of sound; m/sec, ft/sec
C <sub>p</sub>	CP	pressure coefficient; $(p_1 - p_\infty)/q$
M	MACH	Mach number; $V/a$
p		pressure; N/m <sup>2</sup> , psf
q	Q(NSM) Q(PSF)	dynamic pressure; $1/2\rho V^2$ , N/m <sup>2</sup> , psf
RN/L	RN/L	unit Reynolds number; per m, per ft
V		velocity; m/sec, ft/sec
$\alpha$	ALPHA	angle of attack, degrees
$\beta$	BETA	angle of sideslip, degrees
$\psi$	PSI	angle of yaw, degrees
$\phi$	PHI	angle of roll, degrees
$\rho$		mass density; kg/m <sup>3</sup> , slugs/ft <sup>3</sup>

Reference & C.G. Definitions

A <sub>b</sub>		base area; m <sup>2</sup> , ft <sup>2</sup>
b	BREF	wing span or reference span; m, ft
c.g.		center of gravity
$\frac{l_{REF}}{c}$	LREF	reference length or wing mean aerodynamic chord; m, ft
S	SREF	wing area or reference area; m <sup>2</sup> , ft <sup>2</sup>
	MRP	moment reference point
	XMRP	moment reference point on X axis
	YMRP	moment reference point on Y axis
	ZMRP	moment reference point on Z axis

SUBSCRIPTS

b	base
l	local
s	static conditions
t	total conditions
$\infty$	free stream

# NOMENCLATURE (Continued)

## Body-Axis System

<u>SYMBOL</u>	<u>PLOT SYMBOL</u>	<u>DEFINITION</u>
$C_N$	CN	normal-force coefficient; $\frac{\text{normal force}}{qS}$
$C_A$	CA	axial-force coefficient; $\frac{\text{axial force}}{qS}$
$C_Y$	CY	side-force coefficient; $\frac{\text{side force}}{qS}$
$C_{A_b}$	CAB	base-force coefficient; $\frac{\text{base force}}{qS}$ $-A_b(p_b - p_\infty)/qS$
$C_{A_f}$	CAF	forebody axial force coefficient, $C_A - C_{A_b}$
$C_m$	CLM	pitching-moment coefficient; $\frac{\text{pitching moment}}{qS l_{REF}}$
$C_n$	CYN	yawing-moment coefficient; $\frac{\text{yawing moment}}{qS b}$
$C_l$	CBL	rolling-moment coefficient; $\frac{\text{rolling moment}}{qS b}$

## Stability-Axis System

$C_L$	CL	lift coefficient; $\frac{\text{lift}}{qS}$
$C_D$	CD	drag coefficient; $\frac{\text{drag}}{qS}$
$C_{D_b}$	CDB	base-drag coefficient; $\frac{\text{base drag}}{qS}$
$C_{D_f}$	CDF	forebody drag coefficient; $C_D - C_{D_b}$
$C_Y$	CY	side-force coefficient; $\frac{\text{side force}}{qS}$
$C_m$	CLM	pitching-moment coefficient; $\frac{\text{pitching moment}}{qS l_{REF}}$
$C_n$	CLN	yawing-moment coefficient; $\frac{\text{yawing moment}}{qS b}$
$C_l$	CSL	rolling-moment coefficient; $\frac{\text{rolling moment}}{qS b}$
L/D	L/D	lift-to-drag ratio; $C_L/C_D$

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NOMENCLATURE (Continued)  
Additions to Standard Nomenclature

<u>Symbol</u>	<u>Plot Symbol</u>	<u>Defintion</u>
$A_{bET}$		external tank base area, $ft^2$
$A_{bf}$		body flap upper surface area, $ft^2$
$A_{bo}$		Orbiter base area, $ft^2$
$A_{bOMS}$		OMS pod base area, $ft^2$
$A_{bSRB}$		SRB base area, $ft^2$
$C_{AbET}$	CABET	external tank base axial force coefficient
$C_{AbO}$	CABO	Orbiter base axial force coefficient
$C_{AbSRB}$	CABSRB	SRB base axial force coefficient
$C_{AET}$		external tank total axial force coefficient
$C_{AfET}$		external tank forebody axial force coefficient
$C_{AfO}$		Orbiter forebody axial force coefficient
$C_{AfSRB}$		SRB forebody axial force coefficient
$C_{AO}$		Orbiter total axial force coefficient



# NOMENCLATURE (Continued)

<u>Symbol</u>	<u>Plot Symbol</u>	<u>Definition</u>
$C_{p_{b_{OMS}}}$		OMS pod average base pressure coefficient
$C_{p_{b_{SRB}}}$		SRB average base pressure coefficient
$C_{p_i}$		pressure coefficient associated with $i^{th}$ tap
ET		external tank
$i_{b_o}$		Orbiter base incidence angle to a line of constant $X_o$ , deg.
$\ell_b$		Orbiter fuselage length, in.
MRP		moment reference point
OMS		orbital maneuvering system
RN/FT	RN/L	unit Reynolds number, million per foot
$S_e$		elevon surface area, $ft^2$
SRB		solid rocket booster
$X_{bf}$		longitudinal distance from MRP to bodyflap area centroid, in.
$X_{b_o}$		longitudinal distance from MRP to Orbiter base area centroid, in.
$X/C$	$X/CW$	chordwise location on wing
$X/C_v$	$X/CV$	chordwise location on vertical tail
$X_o$		Orbiter longitudinal station, in.
$X_o/L_o$	$X/LT$	location on Orbiter, fraction of Orbiter body length aft of Orbiter nose

# NOMENCLATURE (Continued)

<u>Symbol</u>	<u>Plot Symbol</u>	<u>Definition</u>
$C_{A_{SRB}}$		SRB total axial force coefficient
$\bar{C}_e$		elevon mean aerodynamic chord, in
$C_{h_{eI}}$	CHEI	inboard elevon hinge moment coefficient
$C_{h_{eO}}$	CHEO	outboard elevon hinge moment coefficient
$C_{m_{bf}}$	CMBF	bodyflap upper surface pitching moment coefficient
$C_{m_{bO}}$	CMBO	Orbiter base pitching moment coefficient
$C_{m_{fO}}$		Orbiter forebody pitching moment coefficient
$C_{m_O}$		Orbiter total pitching moment coefficient
$C_{n_{bf}}$		bodyflap upper surface normal force coefficient
$C_{N_{bO}}$		Orbiter base normal force coefficient
$C_{N_{fO}}$		Orbiter forebody normal force coefficient
$C_{N_O}$		Orbiter total normal force coefficient
$C_{p_{bET}}$		external tank average base pressure coefficient
$C_{p_{bf}}$		bodyflap average upper surface pressure coefficient

# NOMENCLATURE (Continued)

<u>Symbol</u>	<u>Plot Symbol</u>	<u>Definition</u>
$C_{p_{b_0}}$		Orbiter average base pressure coefficient
$X_S$	XS	SRB longitudinal station, in.
$X_S/\ell_S$	X/LS	location on SRB, fraction of SRB body length aft of SRB nose
$X_T$	XT	external tank longitudinal station, in.
$X_T/\ell_T$	X/LT	location on ET, fraction of ET body length aft of ET nose
$Y_O$	YO	Orbiter lateral station, in.
$Y_S$	YS	SRB lateral station, in.
$Y_T$	YT	external tank lateral station, in.
$Z_{b_0}$		vertical distance from MRP to Orbiter base area centroid, in.
$Z_O$	ZO	Orbiter vertical station, in.
$Z_S$	ZS	SRB vertical station, in
$Z_T$	ZT	external tank vertical station, in.
$\alpha_O$	ALPHAO	Orbiter angle of attack, degrees
$\alpha_{S_L}$	ALPHAL	left SRB angle of attack, degrees
$\alpha_{S_R}$	ALPHAR	right SRB angle of attack, degrees
$\alpha_T$	ALPHAT	external tank angle of attack, degrees
$\beta_O$	BETAO	Orbiter angle of sideslip, degrees

# NOMENCLATURE (Continued)

<u>Symbol</u>	<u>Plot Symbol</u>	<u>Definition</u>
$\beta_{BL}$	BETAL	left SRB angle of sideslip, degrees
$\beta_{SR}$	BETAR	right SRB angle of sideslip, degrees
$\beta_T$	BETAT	external tank angle of sideslip, degrees
$\delta_{ei}$	ELV-IB	inboard elevon deflection angle, degrees
$\delta_{eo}$	ELV-OB	outboard elevon deflection angle, degrees
$\delta_R$	RUDDER	rudder deflection angle, degrees
$\delta_{SB}$	SPDBRK	speedbrake deflection angle, degrees
$\eta$	2Y/b	spanwise station, 2Y/b
$\phi$	PHI	radial location, degrees
$C_{Ac}$		orbiter sting cavity axial force coefficient
$\beta_I$	BETAI	integrated vehicle angle of sideslip, degrees
$\alpha_I$	ALPHAI	integrated vehicle angle of attack, degrees
X/LB	X/LB	longitudinal position/body length (fuselage)
Y/BW	Y/BW	local spanwise position/wing span
Z/BV	Z/BV	local spanwise position/vertical tail span
SRM	SRM	solid rocket motor

# NOMENCLATURE (Continued)

<u>Symbol</u>	<u>Plot Symbol</u>	<u>Definition</u>
$C_{n_f}$	CYNF	forebody yawing moment coefficient, body axis system
$C_{m_f}$	CLMF	forebody pitching moment coefficient
$C_{N_f}$	CNF	forebody normal force coefficient
$C_{A_{f0}}$	CAFAFO	forebody axial force coefficient at zero alpha
$C_{N_\alpha}$	CNALFA	derivative of normal-force coefficient with respect to alpha, per degree
$X_{cp}/\ell_v$	XAC/LV	vertical tail chordwise center of pressure location
$Y_{cp}/\ell_v$	YAC/LV	vertical tail spanwise center of pressure location
$C_{Y_\beta}$	CYBETA	derivative of side-force coefficient with respect to beta, per degree
$\Delta C_{A_f}$	DCAF	incremental forebody axial force coefficient
$\Delta C_{N_f}$	DCNF	incremental forebody normal force coefficient
$\Delta C_{m_f}$	DCLMF	incremental forebody pitching moment coefficient
CHM1	CHM1	contributions of the forward bridge to the inboard elevon hinge moment coefficient
CHM2	CHM2	contributions of the aft bridge to the inboard elevon hinge moment coefficient
CHM3	CHM3	contributions of the forward bridge to the outboard elevon hinge moment coefficient
CHM4	CHM4	contributions of the aft bridge to the outboard elevon hinge moment coefficient

## NOMENCLATURE (Concluded)

### Data Set Identifiers

The fourth letter of the data set identifier indicates the component, e.g., RETT04.

#### Force

O	Orbiter
T	External Tank
L	Left SRB
R	Right SRB
H	Orbiter - Hinge moment
I	Integrated Vehicle

#### Pressure

B	Orbiter Fuselage
L	Left Wing lower surface
U	Left Wing upper surface
W	Right Wing lower surface
R	Right Wing upper surface
V	Left Vertical Tail
S	SRM Booster
T	External Tank
C	Miscellaneous Orifices

## CONFIGURATIONS INVESTIGATED

The model was a 0.030-scale representation of the Rockwell International Space Shuttle Integrated Vehicle. The Orbiter was per VL70-000140A/B lines. The external tank represented VL78-000063 lines. The solid rocket motors were per VL72-000066 lines. Figures 2a, b, and c present sketches of the model configuration. Model simulation included attach structure protuberances, fairings, fuel feed lines, vent lines, etc. (basic model construction was of ARMC0 17-4 steel).

Model forces and moments were measured by 3 Task Corporation six component balances. A 2.5 in. MK XXA was mounted in the Orbiter. A 2.0 in. MK IIIC was mounted in the external tank. A 1.5 in. MK IIC was mounted in the LH SRB. The balances are attached to stings entering each component through the base areas. Figures 2m and 2n show the balance locations in the model. The RH wing inboard and outboard elevon panels are instrumented with hinge moment gages as shown in figure 1c.

Surface and base pressures were measured on the Orbiter, external tank and solid rocket motors. The Orbiter was instrumented with a total of 480 pressure-orifices, of which 6 were base and cavity pressures. The external tank was instrumented with a total of 314 pressure orifices. The LH SRM was instrumented with a total of 149 pressure orifices. Orifice locations are presented in tables IV through VIII and figures 2d through 2 l.

The following model shorthand configuration notation was used:

LVA' = AT<sub>28</sub> thru 32 FL<sub>10</sub> FL<sub>11</sub> FR<sub>10</sub> N<sub>86</sub> O<sub>1</sub> PT<sub>12</sub> PT<sub>22-27</sub> S<sub>21</sub> T<sub>28</sub>

### CONFIGURATIONS INVESTIGATED (Concluded)

AT <sub>28</sub> thru 32	=	Attach hardware structure
FL <sub>10</sub>	=	LH <sub>2</sub> feedline
FL <sub>11</sub>	=	LO <sub>2</sub> feedline
FR <sub>10</sub>	=	Umbilical door fairing.
N <sub>86</sub>	=	Nozzles for solid rocket boosters
O <sub>1</sub>	=	B <sub>26</sub> C <sub>9</sub> E <sub>44</sub> F <sub>9</sub> M <sub>16</sub> N <sub>28</sub> R <sub>5</sub> V <sub>8</sub> W <sub>116</sub>
PT <sub>12</sub>	=	Lightning rod on nose of T <sub>28</sub>
PT <sub>22</sub> thru 27	=	External protuberance
S <sub>21</sub>	=	Solid rocket boosters
T <sub>28</sub>	=	External tank

Where model dimensions are as described in table III. The LVA' configuration was tested with speed brake gap both sealed and open and with elevon gap both sealed and open. The (instrumented) right elevon gap was sealed by a permanent sponge rubber seal. The left elevon gap was sealed with plaster. Speed brake gaps were sealed by red wax.



## TEST FACILITY DESCRIPTION

The Ames Research Center Unitary Plan 11 by 11 Foot Transonic Wind Tunnel is a closed-circuit, air-medium, variable-density facility capable of attaining Mach numbers from 0.6 to 1.4 at Reynolds numbers from  $1.7 \times 10^6/\text{ft}$  to  $9.4 \times 10^6/\text{ft}$ . The test section is 22 feet long, and models are installed on internal strain-gauge balances mounted to sting-type support systems.

Shadowgraph and Schlieren photographic equipment is available, and pressure transducer instrumentation is provided.

Tunnel operating temperature is 580°R. Extended high Reynolds number runs are restricted by power availability.

## DATA REDUCTION

All balances data were reduced to coefficients about a moment reference point located at:

$$X_T = 976.0 \text{ in.}$$

$$Y_T = 0.0 \text{ in.}$$

$$Z_T = 400.0 \text{ in.}$$

The following reference dimensions were used:

$$S = 2690.0 \text{ ft}^2$$

$$l_b = 1297.0 \text{ in.}$$

Hinge moment data were reduced about their respective hinge lines using the following reference values:

$$S_e = 210.0 \text{ ft}^2$$

$$\bar{C}_e = 90.7 \text{ in.}$$

Base and forebody coefficients were calculated as follows:

$$C_{N_{b_o}} = -C_{P_{b_o}} \frac{A_{b_o}}{S} \tan i_{b_o} - C_{P_{b_{OMS}}} \frac{A_{b_{OMS}}}{S}$$

$$C_{N_{bf}} = -C_{P_{bf}} \frac{A_{bf}}{S}$$

$$C_{A_{b_o}} = -C_{P_{b_o}} \frac{A_{b_o}}{S} - C_{P_{b_{OMS}}} \frac{A_{b_{OMS}}}{S}$$

$$C_{A_{b_{ET}}} = -C_{P_{b_{ET}}} \frac{A_{b_{ET}}}{S}$$

# DATA REDUCTION (Continued)

$$C_{A_{bSRB}} = -C_{p_{bSRB}} \frac{A_{bSRB}}{S}$$

$$C_{m_{b_o}} = - \frac{x_{b_o}}{l_b} C_{N_{b_o}} + \frac{z_{b_o}}{l_b} C_{A_{b_o}}$$

$$C_{m_{bf}} = - \frac{x_{bf}}{l_b} C_{N_{bf}}$$

$$C_{N_{f_o}} = C_{N_o} - C_{N_{b_o}} - C_{N_{bf}}$$

$$C_{m_{f_o}} = C_{m_o} - C_{m_{b_o}} - C_{m_{bf}}$$

$$C_{A_{f_o}} = C_{A_o} - C_{A_{b_o}}$$

$$C_{A_{fET}} = C_{A_{ET}} - C_{A_{bET}}$$

$$C_{A_{fSRB}} = C_{A_{SRB}} - C_{A_{bSRB}}$$

$$A_{bET} = 597.56 \text{ ft}^2$$

$$A_{bf} = 142.6 \text{ ft}^2$$

$$A_{b_o} = 314.10 \text{ ft}^2$$

$$A_{bOMS} = 122.57 \text{ ft}^2$$

# DATA REDUCTION (Concluded)

$$A_{b_{SRB}} = 201.07 \text{ ft}^2$$

$$i_{b_o} = 14.75^\circ$$

$$X_{bf} = 1329.7 \text{ in.}$$

$$X_{b_o} = 1263.0 \text{ in.}$$

$$Z_{b_o} = 336.5 \text{ in.}$$

Base pressure coefficients represented the average pressure on the respective bases. Body flap pressure coefficients were as given by figure 2o.

Right SRB forces and moments were calculated as a mirror image of left SRB forces and moments about  $\beta = 0$ :

$$\begin{pmatrix} \text{Coefficient on} \\ \text{Right SRB} \\ \text{at } +\beta \end{pmatrix} = \begin{pmatrix} \text{Coefficient on} \\ \text{Left SRB} \\ \text{at } -\beta \end{pmatrix}$$

Forces and moment on each component (Orbiter, ET, left SRB, and right SRB) were interpolated versus the respective angle of attack and angle of sideslip of each component to nominal angles. These data were then added to provide total integrated vehicle forces and moments.

TABLE I.

[illegible]

TABLE II.

TEST: IABIA 11-019-1			DATA SET/RUN NUMBER COLLATION SUMMARY										DATE: 8-23-74					
DATA SET IDENTIFIER	CONFIGURATION	SCHD.							ALPHA ~ d									
		$\alpha$	$\beta$	$\delta_{if}$	$\delta_R$	$\delta_{SB}$	M	RN/ft	$\beta=0$	-6	-4	-2	0	2	4	6	8	10
RETOO1	LVA' W/SB HL UNSEALED	I	O	0/0	0	55	1.1	3.0	1									
2	SEAL	E					0.6	3.2	2									
3		E					0.9	3.5	3									
(NOTE) 4		E					1.1	3.0	4									
(NOTE) 5		I					1.25	2.25	5									
6	LVA' BASIC LAUNCH VEHICLE	B	B	8/4	0	0.6				11	10		6		7		8	9
7	LVA' W/ LEFT ELEVON HL UNSEALED	A	A				0.9			18	17	16	12	13	14	15		
8							1.1	3.0					19	20	21*			
9							1.1	2.25		25	24	23	26	27	28	22		
10	LVA' W/ LEFT ELEVON HL SEALED	E	O				1.1		29									
11		A	A				1.25			30	31	32	33	34	35	36		
12		A	A	8/0			1.4			43	44	45	46	47	48/50	49		
13		B	B	8/0			0.6			42	41		37		38		39	40
14		A	A	8/4			1.4			51	52	53	54***	55	56	57		
15				8/6			0.9			65	66	67	68	69	70	71		
16				8/6			1.1			58	59	60	61	62	63	64		
17				10/4			0.9			85	86	87	88	89	90	91		
SEE SUPPLEMENTARY SCHEDULE ON FOLLOWING PAGE																		
TYPE OF DATA																		
$\alpha$ OR $\beta$																		
SCHEDULES																		
COEFFICIENT SCHEDULES																		
IDVAR (1) IDVAR (2) NDV																		

\* RUN 21  $\beta = -6^\circ$  MISSING

★★ RUN 48  $\alpha=4, \beta=-6, -4, 0, 4$

\*\*\* RUN 56  $\alpha=0$ ,  $\beta=-6, -4, -2, 0, 2, 4, 6$

NOTE: D/S 4 & 5 LOST DURING TEST

TABLE II (Continued)

[illegible]

TABLE II (Continued)

COMPONENT	DATASET IDENTIFIER	INDEPENDENT VARIABLES		FORCE COEFFICIENT SCHEDULE							
Orbiter	RETOXX	BETA0	ALPHA0	CNF	CLMF	CA	CY	CYNF	CBL	*CABT	CAF
External Tank	RETTXX	BETAT	ALPHAT	CNF	CLMF	CA	CY	CYNF	CBL	CABT	CAF
Left SRB	RETLXX	BETAL	ALPHAL	CNF	CLMF	CA	CY	CYNF	CBL	CABT	CAF
Hinge Moment	RETHXX	BETA0	ALPHA0	CHEI	CHEO	CHM1	CHM2	CHM3	CHM4		

\* Where CABT is  $C_{A_b} + C_{A_c}$  for each vehicle component.



TABLE II (Concluded)

 $\alpha$  or  $\beta$  Schedules

		Schedule <u>A</u>						
$\beta \backslash \alpha$		-6	-4	-2	0	2	4	6
-6		-	x	x	x	x	x	-
-4		x	x	-	x	-	x	x
-2		x	-	x	-	x	-	x
0		x	x	-	x	-	x	x
2		x	-	x	-	x	-	x
4		x	x	-	x	-	x	x
6		-	x	x	x	x	x	-

		Schedule <u>B</u>				
$\beta \backslash \alpha$		-4	0	4	8	10
-6			x			
-4		x	x	x		
0		x	x	x	x	x
4		x	x	x		
6			x			

		Schedule <u>G</u>				
$\beta \backslash \alpha$		-6	-4	0	4	6
-6				x		
-4			x	x	x	
0		x	x	x	x	x
4			x	x	x	
6				x		

Schedule C

$$\beta = \pm 4, 0, \alpha = \pm 4, 0$$

Schedule E

$$\beta = 0, \alpha = -6, -4, -2, 0, 2, 4, 6$$

Schedule I

$$\beta = 0, \alpha = -6, -4, -2, 0, 2, 4, 6, 8$$

TABLE III. - MODEL DIMENSIONAL DATA

MODEL COMPONENT: ATTACH STRUCTURE - AT<sub>28</sub>

GENERAL DESCRIPTION: Rear orbiter to FT attach structure (LH and RH). 2 Members.

MODEL SCALE: 0.030

MODEL DRAWING NO.: \_\_\_\_\_

DRAWING NO.: VL78-000063, -000062B

DIMENSIONS:	MEMBER		FULL SCALE	MODEL SCALE
	#1	X <sub>O</sub>	<u>1317.00</u>	<u>39.51</u>
		Y <sub>O</sub>	<u>- 96.50 (LH)</u>	<u>- 2.895</u>
			<u>96.50 (RH)</u>	<u>2.895</u>
		Z <sub>O</sub>	<u>267.50</u>	<u>8.025</u>
		X <sub>T</sub>	<u>2058.00</u>	<u>61.740</u>
		Y <sub>T</sub>	<u>- 125.68 (LH)</u>	<u>- 3.770</u>
			<u>125.68 (RH)</u>	<u>3.770</u>
		Z <sub>T</sub>	<u>515.5</u>	<u>15.465</u>
	#2	X <sub>O</sub>	<u>1317.00</u>	<u>39.51</u>
		Y <sub>O</sub>	<u>- 96.50 (LH)</u>	<u>- 2.895</u>
			<u>96.50 (RH)</u>	<u>2.895</u>
		Z <sub>O</sub>	<u>267.50</u>	<u>8.025</u>
		X <sub>T</sub>	<u>1872.00</u>	<u>56.160</u>
		Y <sub>T</sub>	<u>-125.68 (LH)</u>	<u>- 3.770</u>
			<u>125.68 (RH)</u>	<u>3.770</u>
		Z <sub>T</sub>	<u>504.5</u>	<u>15.135</u>
Diameter, In.	#1		<u>11.5</u>	<u>0.345</u>
	#2		<u>15.5</u>	<u>0.465</u>

TABLE III. - MODEL DIMENSIONAL DATA - Continued.

MODEL COMPONENT: ATTACH STRUCTURE - AT<sub>20</sub>

GENERAL DESCRIPTION: Right-hand umbilical fairing to ET cross member attach structure (1 member).

MODEL SCALE: 0.030

MODEL DRAWING NO.: \_\_\_\_\_

DRAWING NO.: VI.78-000062B, -Martin Marietta 82600207000

DIMENSIONS:

		<u>FULL SCALE</u>	<u>MODEL SCALE</u>
Umbilical fairing attach point:	X <sub>O</sub>	<u>1317.00</u>	<u>39.510</u>
	Y <sub>O</sub>	<u>66.316</u>	<u>1.989</u>
	Z <sub>O</sub>	<u>247.182</u>	<u>7.415</u>
	X <sub>T</sub>	<u>2058.683</u>	<u>61.740</u>
	Y <sub>T</sub>	<u>66.316</u>	<u>1.989</u>
	Z <sub>T</sub>	<u>583.683</u>	<u>17.510</u>
ET attach point:	X <sub>T</sub>	<u>2058.00</u>	<u>61.740</u>
	Y <sub>T</sub>	<u>- 12.00</u>	<u>- 0.360</u>
	Z <sub>T</sub>	<u>568.25</u>	<u>17.048</u>
	X <sub>O</sub>	<u>1317.00</u>	<u>39.510</u>
	Y <sub>O</sub>	<u>- 12.00</u>	<u>- 0.36</u>
	Z <sub>O</sub>	<u>60.75</u>	<u>1.823</u>
Attach structure dia., in.		<u>4.5</u>	<u>0.135</u>

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TABLE III. - MODEL DIMENSIONAL DATA - Continued.

MODEL COMPONENT: ATTACH STRUCTURE - AT<sub>30</sub>

GENERAL DESCRIPTION: Forward SRR to ET attach structure (LH and RH).

MODEL SCALE: 0.030

DRAWING NO.: VL78-000066, Martin Marietta 82600204300

DIMENSIONS:		<u>FULL SCALE</u>	<u>MODEL SCALE</u>
Attach point	X <sub>T</sub>	985.675	29.570
	Y <sub>T</sub>	-172.50 (LH)	- 5.175
		172.50 (RH)	5.175
	Z <sub>T</sub>	0.0	0.0
	X <sub>S</sub>	442.675	13.280
	Y <sub>S</sub>	80.00	2.400
	Z <sub>S</sub>	0.0	0.0
	X <sub>O</sub>	244.675	7.340
	Y <sub>O</sub>	- 184.5 (LH)	-5.535
		184.5 (RH)	5.535
	Z <sub>O</sub>	0.0	0.0

TABLE III. - MODEL DIMENSIONAL DATA - Continued.

MODEL COMPONENT: ATTACH STRUCTURE - AT<sub>31</sub>

GENERAL DESCRIPTION: Rear ET to SRB attach structure (LH & RH), 3 members.

MODEL SCALE: 0.030

MODEL DRAWING: \_\_\_\_\_

DRAWING NO.: VL7E-000063, -000062B, -000066

DIMENSIONS:	MEMBER	FULL SCALE	MODEL SCALE	
ORIGINAL PAGE IS OF POOR QUALITY	#1	X <sub>T</sub>	2058.00	61.74
		Y <sub>T</sub>	- 171.50 (LH)	- 5.145
			171.50 (RH)	5.145
		Z <sub>T</sub>	457.00	13.710
		X <sub>S</sub>	1511.00	45.33
		Y <sub>S</sub>	53.24	1.597
		Z <sub>S</sub>	57.00	1.710
	#2	X <sub>T</sub>	2058.00	61.74
		Y <sub>T</sub>	- 163.58	- 4.916
		Z <sub>T</sub>	449.81	13.494
		X <sub>S</sub>	1511.00	45.33
		Y <sub>S</sub>	76.56	2.297
		Z <sub>S</sub>	15.73	0.472
		#3	X <sub>T</sub>	2058.00
	Y <sub>T</sub>		- 161.72	- 4.852
	Z <sub>T</sub>		343.00	10.29
	X <sub>S</sub>		1511.00	45.33
	Y <sub>S</sub>		53.24	1.597
	Z <sub>S</sub>		- 57.00	- 1.710
	Diameter of members, In.:		#1	
		#2		
		#3		

TABLE III.- MODEL DIMENSIONAL DATA - Continued.

MODEL COMPONENT: ATTACH STRUCTURE - AT32

GENERAL DESCRIPTION: Forward orbiter/ET attach structure (2 member structure)

MODEL SCALE: 0.030

DRAWING NO.: VL78-000062B, Martin Marietta 8260020914

DIMENSIONS:	MEMBER	FULL SCALE	MODEL SCALE
	#1		
	X <sub>O</sub>	<u>388.15</u>	<u>11.6445</u>
	Y <sub>O</sub>	<u>0.0</u>	<u>0.0</u>
	(Attach pt on orb Z <sub>T</sub> = 614) Z <sub>O</sub>	<u>LWR ML</u>	<u>LWR ML</u>
	X <sub>T</sub>	<u>1129.9</u>	<u>34.05</u>
	Y <sub>T</sub>	<u>- 46.50</u>	<u>1.395</u>
	(Attach pt on tank) Z <sub>T</sub>	<u>562.58</u>	<u>16.877</u>
	#2		
	X <sub>O</sub>	<u>388.15</u>	<u>11.645</u>
	Y <sub>O</sub>	<u>0.0</u>	<u>0.0</u>
	Z <sub>O</sub>	<u>LWR ML</u>	<u>LWR ML</u>
	X <sub>T</sub>	<u>1129.9</u>	<u>34.05</u>
	Y <sub>T</sub>	<u>- 46.50</u>	<u>- 1.395</u>
	Z <sub>T</sub>	<u>562.58</u>	<u>16.877</u>
Diameter, In.	#1	<u>6.0</u>	<u>0.180</u>
	#2	<u>6.0</u>	<u>0.180</u>

TABLE III.- MODEL DIMENSIONAL DATA - Continued.

MODEL COMPONENT : BODY - P26

GENERAL DESCRIPTION : Configuration 140A/B orbiter fuselage

NOTE: B<sub>26</sub> is identical to B<sub>21</sub>, except underside of fuselage has been  
refaired to accept W<sub>116</sub>.

MODEL SCALE: 0.030 MODEL DRAWING NO.: SS-A00147, Rel. 12.

DRAWING NUMBER : VI70-000143B, -000200, -000205, -006089, -000145,  
-000140A, -000140B

DIMENSIONS :	FULL SCALE	MODEL SCALE
Length (OML: Fwd Sta. $X_0=235$ ), In.	1293.3	38.799
Length (IML: Fwd Sta. $X_0=238$ ), In.	1290.3	38.709
Max Width (@ $X_0 = 1528.3$ ), In.	264.0	7.920
Max Depth (@ $X_0 = 1464$ ), In.	250.00	7.500
Fineness Ratio	0.264	0.264
Area - Ft. <sup>2</sup>		
Max. Cross-Sectional	340.88	0.307
Planform		
Wetted		
Base		

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TABLE III. - MODEL DIMENSIONAL DATA - Continued.

MODEL COMPONENT : CANOPY - C<sub>9</sub>

GENERAL DESCRIPTION : Configuration 3A. Canopy used with fuselage B<sub>26</sub>

MODEL SCALE: 0.030

MODEL DWG NO.: SS-A00J47

DRAWING NUMBER : VL70-000143A

DIMENSIONS :	FULL SCALE	MODEL SCALE
Length ( $X_O = 434.643$ to $578$ ), In.	<u>143.357</u>	<u>4.301</u>
Max Width ( $X_O = 513.127$ ), In.	<u>152.412</u>	<u>4.572</u>
Max Depth (At $X_O = 485.$ ), In.	<u>25.000</u>	<u>0.750</u>
Fineness Ratio	<u>                    </u>	<u>                    </u>
Area	<u>                    </u>	<u>                    </u>
Max. Cross-Sectional	<u>                    </u>	<u>                    </u>
Planform	<u>                    </u>	<u>                    </u>
Wetted	<u>                    </u>	<u>                    </u>
Base	<u>                    </u>	<u>                    </u>



TABLE III. - MODEL DIMENSIONAL DATA - Continued.

MODEL COMPONENT: ELEVON - E<sub>11</sub>

GENERAL DESCRIPTION: 6.0 In. F.B. gaps machined into E<sub>11</sub> elevon. Flapper doors, centerbody pieces, and tipseals are not simulated. (Data are for one of two sides).

MODEL SCALE: 0.030

DRAWING NUMBER: Not available

<u>DIMENSIONS:</u>	<u>FULL-SCALE</u>	<u>MODEL SCALE</u>
Area -- Ft <sup>2</sup>	<u>210.0</u>	<u>0.189</u>
Span (equivalent), In.	<u>349.2</u>	<u>10.476</u>
Inb'd equivalent chord, In.	<u>118.0</u>	<u>3.54</u>
Outb'd equivalent chord, In.	<u>55.19</u>	<u>1.656</u>
Ratio movable surface chord/ total surface chord		
At Inb'd equiv. chord	<u>0.2096</u>	<u>0.2096</u>
At Outb'd equiv. chord	<u>0.2096</u>	<u>0.2096</u>
Sweep Back Angles, degrees		
Leading Edge	<u>0.00</u>	<u>0.00</u>
Trailing Edge	<u>- 10.056</u>	<u>- 10.056</u>
Hingeline	<u>0.00</u>	<u>0.00</u>
Area Moment (Product of area & c) (Normal to hingeline), Ft. <sup>3</sup>	<u>1587.25</u>	<u>0.0429</u>
Mean Aerodynamic Chord, In.	<u>90.7</u>	<u>2.721</u>

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TABLE III. - MODEL DIMENSIONAL DATA - Continued.

MODEL COMPONENT : BODY FLAP - F<sub>9</sub>

GENERAL DESCRIPTION : Configuration 140 A/B

MODEL SCALE: 0.030

DRAWING NUMBER : VI70-000140B, -000200

DIMENSIONS :	FULL SCALE	MODEL SCALE
Length (Chord), In.	<u>84.7</u>	<u>2.541</u>
Max Width , In.	<u>262.308</u>	<u>7.869</u>
Max Depth , In.	<u>23.00</u>	<u>0.690</u>
Fineness Ratio	<u></u>	<u></u>
Area - Ft. <sup>2</sup>	<u></u>	<u></u>
Max. Cross-Sectional	<u></u>	<u></u>
Planform	<u>142.60</u>	<u>0.128</u>
Wetted	<u></u>	<u></u>
Base	<u>41.90</u>	<u>0.0377</u>

TABLE III. - MODEL DIMENSIONAL DATA - Continued.

MODEL COMPONENT: FEEDLINE - FI<sub>10</sub>

GENERAL DESCRIPTION: LH<sub>2</sub> feedline on upper left-hand side of T<sub>28</sub>.

MODEL SCALE: 0.030

DRAWING NO.: VL78-000063, -000062B

DIMENSIONS:		<u>FULL SCALE</u>	<u>MODEL SCALE</u>
Leading edge at:	X <sub>T</sub>	2071.5	62.145
	Y <sub>T</sub>	- 70.0	- 2.100
	Z <sub>T</sub>	573.934	17.218
Trailing edge at:	X <sub>T</sub>	2081.80	62.454
	Y <sub>T</sub>	- 70.00	- 2.10
	Z <sub>T</sub>	584.059	17.522
Diameter of line (17.0 I.D.)		18.160	0.545

TABLE III. - MODEL DIMENSIONAL DATA - Continued.

MODEL COMPONENT: FEEDLINE - FL<sub>11</sub>

GENERAL DESCRIPTION: LO<sub>2</sub> feedline on upper right-hand of T<sub>28</sub>.

MODEL SCALE: 0.030

DRAWING NO.: VL78-000063, VL78-000062B

DIMENSIONS:

		<u>FULL SCALE</u>	<u>MODEL SCALE</u>
Leading edge at:	X <sub>T</sub>	<u>1000.667</u>	<u>30.02</u>
	Y <sub>T</sub>	<u>70.00</u>	<u>2.10</u>
	Z <sub>T</sub>	<u>150.519</u>	<u>4.516</u>
Trailing edge at:	X <sub>T</sub>	<u>2071.5</u>	<u>62.145</u>
	Y <sub>T</sub>	<u>70.00</u>	<u>2.100</u>
	Z <sub>T</sub>	<u>573.934</u>	<u>17.218</u>
Line diameter (17.0 I.D.)	(O.D.)	<u>18.16</u>	<u>0.545</u>

TABLE III. -MODEL DIMENSIONAL DATA - Continued.

MODEL COMPONENT: FAIRING - FR<sub>10</sub>

GENERAL DESCRIPTION: Umbilical door fairing between aft ET/orbiter attach structure.

MODEL SCALE: 0.030

DRAWING NO.: VI.78-000063, -000062B, Martin Marietta 82600207000

DIMENSIONS:	<u>FULL SCALE</u>	<u>MODEL SCALE</u>
Leading edge at	2052.0	61.74
Length	193.0	5.79
Width	15.0	0.45

TABLE III. - MODEL DIMENSIONAL DATA - Continued.

MODEL COMPONENT: OMS POD - M<sub>16</sub>

GENERAL DESCRIPTION: Configuration 140C orbiter OMS pod - short pod

MODEL SCALE: 0.030.

DRAWING NUMBER VL70-008401, -008410

<u>DIMENSION:</u>	<u>FULL SCALE</u>	<u>MODEL SCALE</u>
Length (OMS Fwd Sta. $X_0=1310.5$ ), In.	<u>258.50</u>	<u>7.755</u>
Max Width (@ $X_0 = 1511$ ), In.	<u>136.8</u>	<u>4.104</u>
Max Depth (@ $X_0 = 1511$ ), In.	<u>74.70</u>	<u>2.241</u>
Finessess Ratio	<u>2.484</u>	<u>2.484</u>
Area - Ft <sup>2</sup>		
Max Cross-Sectional	<u>58.864</u>	<u>0.053</u>
Planform	<u>          </u>	<u>          </u>
Wetted	<u>          </u>	<u>          </u>
Base	<u>          </u>	<u>          </u>

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TABLE III. - MODEL DIMENSIONAL DATA- Continued.

MODEL COMPONENT: OMS NOZZLES - N28GENERAL DESCRIPTION: Configuration 140A 'B orbiter OMS NozzlesMODEL SCALE: 0.030DRAWING NUMBER: VL70-000140A (Location), SS-A00106, Rel. 5 (Contour)

DIMENSIONS:	<u>FULL SCALE</u>	<u>MODEL SCALE</u>
MACH NO.		
Length - In.		
Gimbal Point to Exit Plane		
Throat to Exit Plane		
Diameter - In.		
Exit		
Throat		
Inlet		
Area - ft <sup>2</sup>		
Exit		
Throat		
Gimbal Point (Station) - In.		
Left <del>Upper</del> Nozzle		
X <sub>o</sub>	1518.00	45.54
Y <sub>o</sub>	- 88.0	-2.64
Z <sub>o</sub>	492.00	14.76
Right <del>Lower</del> Nozzle		
X <sub>o</sub>	1518.00	45.54
Y <sub>o</sub>	88.0	2.64
Z <sub>o</sub>	492.00	14.76
Null Position - Deg.		
Left <del>Upper</del> Nozzle		
Pitch	15°49'	15°49'
Yaw	12°17'	12°17'
Right <del>Lower</del> Nozzle		
Pitch	15°49'	15°49'
Yaw	12°17'	12°17'

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TABLE III. - MODEL DIMENSIONAL DATA - Continued.

MODEL COMPONENT: BSRM NOZZLE - N86

GENERAL DESCRIPTION: Booster solid rocket motor nozzles.

MODEL SCALE: 0.030

DRAWING NO.: VL70-000066

DIMENSIONS:

	<u>FULL SCALE</u>	<u>MODEL SCALE</u>
Diameter, $D_{ex}$ - In. (I.D.)	144.29	4.3287
Diameter, $D_{ex}$ - In. (O.D.)	146.79	4.4037
Diameter, DT - IN.		
Diameter, $D_{in}$ - In.		
Area - Ft <sup>2</sup>		
Max. Cross-sectional (I.D.)	113.553	0.102
Gimbal Origin:		
Left Nozzle		
$X_o$	1902.6	57.078
$Y_o$	-250.50	- 7.515
$Z_o$	400.0	12.00
Right Nozzle		
$X_o$	1902.6	57.078
$Y_o$	250.50	7.515
$Z_o$	400.0	12.00
Null Position: (Deg.)		
Left nozzle gimbal	$\pm 8$	$\pm 8$
Right nozzle gimbal	$\pm 8$	$\pm 8$



TABLE III. - MODEL DIMENSIONAL DATA - Continued.

MODEL COMPONENT: ET PROTUBERANCE - PT<sub>12</sub>

GENERAL DESCRIPTION: Lightning rod attached to ET nose.

MODEL SCALE: 0.030

DIMENSIONS:

	<u>FULL SCALE</u>	<u>MODEL SCALE</u>
Length	30.90	0.927
Diameter - In.	3.20	0.096

TABLE III. - MODEL DIMENSIONAL DATA - Continued.

MODEL COMPONENT: ELECTRICAL LINE - PT<sub>22</sub>

GENERAL DESCRIPTION: Left-hand electrical conduit line on T<sub>22</sub>.

MODEL SCALE: 0.030.

DRAWING NUMBER VL78-000063, -000062B

<u>DIMENSION:</u>		<u>FULL SCALE</u>	<u>MODEL SCALE</u>
Leading edge at:	X <sub>T</sub>	<u>1084.333</u>	<u>32.530</u>
	Y <sub>T</sub>	<u>- 99.591</u>	<u>- 2.988</u>
	Z <sub>T</sub>	<u>-139.620</u>	<u>- 4.189</u>
Trailing edge at:	X <sub>T</sub>	<u>2058.000</u>	<u>61.740</u>
	Y <sub>T</sub>	<u>- 99.591</u>	<u>- 2.988</u>
	Z <sub>T</sub>	<u>- 139.620</u>	<u>- 4.189</u>
Conduit size:		<u>2.0 x 6.0</u>	<u>0.06 x 0.18</u>
Centerline of line located radially at $\theta = 35.5$ deg.		<u></u>	<u></u>

TABLE III. - MODEL DIMENSIONAL DATA - Continued.

MODEL COMPONENT: LO<sub>2</sub> RECIRCULATION LINE - PT<sub>23</sub>

GENERAL DESCRIPTION: LO<sub>2</sub> recirculation line on right-hand upper side  
side of T<sub>28</sub>.

MODEL SCALE: 0.030

DRAWING NO.: VL78-000063, -000062B, Martin Marietta 82600207000

DIMENSIONS:		<u>FULL SCALE</u>	<u>MODEL SCALE</u>
Leading edge at:	X <sub>T</sub>	1040.667	31.220
	Y <sub>T</sub>	94.169	2.825
	Z <sub>T</sub>	540.934	16.228
Trailing edge at:	X <sub>T</sub>	2062.920	61.888
	Y <sub>T</sub>	70.000	2.100
	Z <sub>T</sub>	573.934	17.218
Diameter of line		4.0	0.120

Centerline of line located radially at  $\theta = 33^{\circ}45'$   
(Right of TDC looking forward)

TABLE III. - MODEL DIMENSIONAL DATA - Continued.

MODEL COMPONENT:  $LH_2$  RECIRCULATION LINE - PT<sub>24</sub>

GENERAL DESCRIPTION:  $LH_2$  recirculation line on T<sub>28</sub>.

MODEL SCALE: 0.030

DRAWING NO.: VL78-000063, -000062B, Martin Marietta 82600207000

DIMENSIONS:		<u>FULL SCALE</u>	<u>MODEL SCALE</u>
Leading edge at:	X <sub>T</sub>	1040.667	31.220
	Y <sub>T</sub>	- 94.169	- 2.825
	Z <sub>T</sub>	540.934	16.228
Trailing edge at:	X <sub>T</sub>	2062.920	61.888
	Y <sub>T</sub>	- 70.00	-2.100
	Z <sub>T</sub>	573.934	17.218
Diameter of line		4.00	0.120

Centerline of line located radially at  $\theta = 33^\circ 45'$   
(Left of TDC looking forward)

TABLE III. - MODEL DIMENSIONAL DATA - Continued.

MODEL COMPONENT: ELECTRICAL LINE - PT<sub>25</sub>

GENERAL DESCRIPTION: Right-hand aft electrical conduit line on T<sub>28</sub> with  
LH<sub>2</sub> pressure sensor line and LOX vent valve actuator line.

MODEL SCALE: 0.030

DRAWING NO.: VL78-000063, -000062B, Martin Marietta 82600207000

DIMENSIONS:

		<u>FULL SCALE</u>	<u>MODEL SCALE</u>
Leading edge at:	X <sub>T</sub>	<u>1084.333</u>	<u>32.530</u>
	Y <sub>T</sub>	<u>99.591</u>	<u>2.988</u>
	Z <sub>T</sub>	<u>139.620</u>	<u>4.189</u>
Trailing edge at:	X <sub>T</sub>	<u>2058.000</u>	<u>61.74</u>
	Y <sub>T</sub>	<u>99.591</u>	<u>2.988</u>
	Z <sub>T</sub>	<u>139.620</u>	<u>4.189</u>
Line diameter		<u>2.0 x 6.0</u>	<u>0.06 x 0.18</u>
Centerline of line located radially at $\theta = 35.5^\circ$			

TABLE III. - MODEL DIMENSIONAL DATA - Continued.

MODEL COMPONENT:  $LO_2$  PRESSURE LINE - PT<sub>26</sub>

GENERAL DESCRIPTION:  $LO_2$  pressure line on T<sub>28</sub>.

MODEL SCALE: 0.030

DRAWING NO.: VL78-000063, -000062B, Martin Marietta 82600207000

DIMENSIONS:		<u>FULL SCALE</u>	<u>MODEL SCALE</u>
Leading edge at:	X <sub>T</sub>	360.733	10.822
	Y <sub>T</sub>	15.145	0.454
	Z <sub>T</sub>	407.718	12.232
Trailing edge at:	X <sub>T</sub>	2083.5	62.505
	Y <sub>T</sub>	63.25	1.898
	Z <sub>T</sub>	609.00	18.27
Centerline of line located radially at $\theta = 27^\circ$			
Line diameter		2.0	0.060



TABLE III. - MODEL DIMENSIONAL DATA - Continued.

MODEL COMPONENT: ELECTRICAL LINE - PT<sub>27</sub>

GENERAL DESCRIPTION: Electrical conduit on the right-hand forward section of T<sub>28</sub>.

MODEL SCALE: 0.030

DRAWING NO.: VI.78-000062B

DIMENSIONS:		<u>FULL SCALE</u>	<u>MODEL SCALE</u>
Leading edge at:	X <sub>T</sub>	360.733	10.822
	Y <sub>T</sub>	11.549	0.346
	Z <sub>T</sub>	412.474	12.374
Trailing edge at:	X <sub>T</sub>	876.273	26.288
	Y <sub>T</sub>	226.114	6.783
	Z <sub>T</sub>	646.774	19.403

Centerline of conduit located radially at  $\theta = 47.5^\circ$

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TABLE III. - MODEL DIMENSIONAL DATA - Continued.

MODEL COMPONENT: RUDDER - R<sub>5</sub>

GENERAL DESCRIPTION: Configuration 1400 orbiter rudder (Identical to configuration 140A 'B' rudder).

MODEL SCALE: 0.030

DRAWING NUMBER: VL70-000146B. --000095

<u>DIMENSIONS:</u>	<u>FULL-SCALE</u>	<u>MODEL SCALE</u>
Area - Ft <sup>2</sup>	<u>100.15</u>	<u>0.090</u>
Span (equivalent), In.	<u>201.0</u>	<u>6.03</u>
Inb'd equivalent chord, In.	<u>91.585</u>	<u>2.748</u>
Outb'd equivalent chord, In.	<u>50.833</u>	<u>1.525</u>
Ratio movable surface chord/ total surface chord		
At Inb'd equiv. chord	<u>0.400</u>	<u>0.400</u>
At Outb'd equiv. chord	<u>0.400</u>	<u>0.400</u>
Sweep Back Angles, degrees		
Leading Edge	<u>34.83</u>	<u>34.83</u>
Trailing Edge	<u>26.25</u>	<u>26.25</u>
Hingeline	<u>34.83</u>	<u>34.83</u>
Area Moment (Product of area & $\bar{c}$ ) (Normal to hingeline), Ft. <sup>3</sup>	<u>610.92</u>	<u>0.016</u>
Mean Aerodynamic Chord, In.	<u>73.2</u>	<u>2.196</u>

TABLE III. - MODEL DIMENSIONAL DATA - Continued.

MODEL COMPONENT: BOOSTER SOLID ROCKET MOTOR - S<sub>21</sub>

GENERAL DESCRIPTION: \_\_\_\_\_

MODEL SCALE: 0.030

DRAWING NUMBER VI.72-000143D, VI.77-000066

<u>DIMENSION:</u>	<u>FULL SCALE</u>	<u>MODEL SCALE</u>
Length (Includes nozzle), In.	1789.40	53.682
<del>Max Width</del> Tank Diameter, In.	146.00	4.38
<del>Max Depth</del> Aft shroud Dia., In.	192.00	5.76
Fineness Ratio	9.3198	9.3198
Area - Ft <sup>2</sup>		
Max Cross-Sectional	201.062	0.1809
Planform		
Wetted		
Base		
WP of BSRM centerline (Z <sub>T</sub> )	400.0	1.200
FS of BSRM nose (X <sub>T</sub> )	743.0	22.29
BP of BSRM centerline (Y <sub>T</sub> )	250.5	7.515

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TABLE III. - MODEL DIMENSIONAL DATA - Continued.

MODEL COMPONENT: EXTERNAL TANK - T<sub>20</sub>

GENERAL DESCRIPTION: \_\_\_\_\_

NOTE: (Dimensions are to tank structural OML, TPS not included.)

MODEL SCALE: 0.030

DRAWING NUMBER VL72-000143D, VL78-000063

<u>DIMENSION:</u>	<u>FULL SCALE</u>	<u>MODEL SCALE</u>
Length, In.	<u>1844.275</u>	<u>55.328</u>
Max <del>Width</del> Dia., In.	<u>331.00</u>	<u>9.93</u>
Max Depth	<u>          </u>	<u>          </u>
Fineness Ratio	<u>5.687</u>	<u>5.687</u>
Area - Ft <sup>2</sup>		
Max Cross-Sectional	<u>594.678</u>	<u>0.053</u>
Planform	<u>          </u>	<u>          </u>
Wetted	<u>          </u>	<u>          </u>
Base	<u>          </u>	<u>          </u>

TABLE III. - MODEL DIMENSIONAL DATA - Continued.

MODEL COMPONENT: VERTICAL - V<sub>8</sub>

GENERAL DESCRIPTION: Configuration 140C orbiter vertical tail (identical to configuration 140A/B vertical tail)

MODEL SCALE: 0.030

DRAWING NUMBER: VL70-000140C, -000146B

DIMENSIONS:	<u>FULL SCALE</u>	<u>MODEL SCALE</u>
TOTAL DATA		
Area (Theo) - Ft <sup>2</sup>		
Planform	<u>413.253</u>	<u>0.372</u>
Span (Theo) - In.	<u>315.72</u>	<u>9.472</u>
Aspect Ratio	<u>1.675</u>	<u>1.675</u>
Rate of Taper	<u>0.507</u>	<u>0.507</u>
Taper Ratio	<u>0.404</u>	<u>0.404</u>
Sweep-Back Angles, Degrees.		
Leading Edge	<u>45.000</u>	<u>45.000</u>
Trailing Edge	<u>26.25</u>	<u>26.25</u>
0.25 Element Line	<u>41.13</u>	<u>41.13</u>
Chords:		
Root (Theo) WP	<u>268.50</u>	<u>8.055</u>
Tip (Theo) WP	<u>108.47</u>	<u>3.254</u>
MAC	<u>199.81</u>	<u>5.992</u>
Fus. Sta. of .25 MAC	<u>1463.35</u>	<u>43.901</u>
W.P. of .25 MAC	<u>635.52</u>	<u>19.066</u>
B.L. of .25 MAC	<u>0.00</u>	<u>0.00</u>
Airfoil Section		
Leading Wedge Angle - Deg.	<u>10.00</u>	<u>10.00</u>
Trailing Wedge Angle - Deg.	<u>14.92</u>	<u>14.92</u>
Leading Edge Radius	<u>2.00</u>	<u>0.060</u>
Void Area	<u>13.17</u>	<u>0.0019</u>
Blanketed Area	<u>0.0</u>	<u>0.0</u>

TABLE III. - MODEL DIMENSIONAL DATA - Concluded.

MODEL COMPONENT: WING-W 114GENERAL DESCRIPTION: Configuration 4NOTE: Identical to W<sub>111</sub>, except airfoil thickness. Dihedral angle is along trailing edge of wing.MODEL SCALE: 0.030TEST NO.DWG. NO. VI70-000140A, -000200DIMENSIONS:FULL-SCALEMODEL SCALETOTAL DATAArea (Theo.)  $\text{Ft}^2$ 

Planform

2690.00

2.421

Span (Theo) In.

936.68

29.10

Aspect Ratio

2.265

2.265

Rate of Taper

1.177

1.177

Taper Ratio

0.200

0.200

Dihedral Angle, degrees

3.500

3.500

Incidence Angle, degrees

0.500

0.500

Aerodynamic Twist, degrees

3.000

3.000

Sweep Back Angles, degrees

Leading Edge

45.000

45.000

Trailing Edge

- 10.056

- 10.056

0.25 Element Line

35.209

35.209

## Chords:

Root (Theo) B.P.O.O.

689.24

20.677

Tip, (Theo) B.P.

137.85

4.136

MAC

474.81

14.244

Fus. Sta. of .25 MAC

1136.83

34.105

W.P. of .25 MAC

290.58

8.717

B.L. of .25 MAC

182.13

5.464

EXPOSED DATAArea (Theo)  $\text{Ft}^2$ 

1751.50

1.576

Span, (Theo) In. BP108

720.68

21.620

Aspect Ratio

2.059

2.059

Taper Ratio

0.245

0.245

## Chords

Root BP108

562.09

16.863

Tip 1.00  $\frac{b}{2}$ 

137.85

4.136

MAC

392.83

11.785

Fus. Sta. of .25 MAC

1185.98

35.579

W.P. of .25 MAC

294.30

8.839

B.L. of .25 MAC

251.77

7.553

Airfoil Section (Rockwell Mod NASA)

XXXX-64

Root  $\frac{b}{2}$  =

0.113

0.113

Tip  $\frac{b}{2}$  =

0.120

0.120

Data for (1) of (2) Sides

Leading Edge Cuff  $\text{Ft}^2$ 

113.18

0.107

Planform Area

500.0

15.00

Leading Edge Intersects Fus M. L. @ Sta

1024.00

30.72

Leading Edge Intersects Wing @ Sta

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TABLE IV.  
ORBITER WING PRESSURE TAP NUMBERS

N	Y	ORBITER LEFT WING PRESSURE TAP NUMBERS																		No. TAPS	TAPS
235	110	X/C	0	.041	.113	.247	.429	.547	.638	.727	.793									9	9
		TOP	208	209	210	211	212	213	214	215	216									0	
		BOT	—	—	—	—	—	—	—	—	—										
299	140	X/C	0	.010	.020	.050	.0944	.229	.362	.497	.700	.834	.865	.900	.965					13	34
		TOP	217	218	219	220	221	222	223	224	225	226	227	228	229					12	
		BOT	230	231	232	233	234	235	236	237	238	239	240	241							
344	170	X/C	0	.010	.020	.040	.086	.163	.246	.390	.637	.798	.839	.879	.919	.955					
		TOP	242	243	244	245	246	247	248	249	250	251	252	253	254	255			14	61	
		BOT	256	257	258	259	260	261	262	263	264	265	266	267	268			13			
427	200	X/C	0	.010	.020	.040	.0813	.177	.270	.402	.545	.760	.808	.857	.905	.953	1.000				
		TOP	269	270	271	272	273	274	275	276	277	278	279	280	281	282			14	89	
		BOT	283	284	285	286	287	288	289	290	291	292	293	294	295	296			14		
534	250	X/C	0	.010	.020	.050	.080	.150	.250	.400	.550	.725	.775	.850	.900	.950					
		TOP	297	298	299	300	301	302	303	304	305	306	307	308	309	310			14	116	
		BOT	311	312	313	314	315	316	317	318	319	320	321	322	323			13			
673	300	X/C	0	.010	.020	.050	.150	.250	.400	.550	.700	.775	.850	.950	1.000						
		TOP	324	325	326	327	328	329	330	331	332	333	334	335					12	140	
		BOT	336	337	338	339	340	341	342	343	344	345	346	347					12		
746	365	X/C	0	.010	.020	.050	.150	.250	.400	.550	.700	.775	.850	.950							
		TOP	348	349	350	351	352	353	354	355	356	357							10	159	
		BOT	358	359	360	361	362	363	364	365	366								9		
887	415	X/C	0	.010	.020	.050	.150	.250	.400	.550	.700	.775	.850	.950	1.000						
		TOP	367	368	369	370	371	372	373	374	375	376							10	179	
		BOT	377	378	379	380	381	382	383	384	385	386							10		
1172	455	X/C	0	.020	.069	.157	.345	.503	.670	.862											
		TOP	387	388	389	390	391	392	393	394									8	194	
		BOT	395	396	397	398	399	400	401										7		
1000 WING TIP	468.34	X	1362	1405																	
		TOP	402	403																2	196
		BOT																			
N	Y	ORBITER RIGHT WING PRESSURE TAP NUMBERS																		No. TAPS	TAPS
235	110	X/C	0	.041	.113	.247	.429	.547	.638	.727	.793										
		TOP	404	405	406	407	408	409	410	411	412									3	205
		BOT																			
364	170	X/C	0	.010	.020	.040	.086	.163	.246	.390	.637										
		TOP	413	414	415	416	—	417	418	419	420	421							9	222	
		BOT	422	423	424	425	426	427	428	429									5		

TABLE V. ORBITER FUSELAGE PRESSURE TAP NUMBERS

[illegible]

L. = 1297.0 IN.

a. OMS POD, INSIDE

6. OMS POD OUTSIDE

TABLE VI. ORBITER VERTICAL TAIL PRESSURE TAP  
NUMBERS (LEFT SIDE ONLY)

Z <sub>0</sub>	VERTICAL		$\eta_v$	X/CV									No. TAPS	TAPS
	FULL SCALE	MODEL SCALE		0	.025	.05	.15	.30	.52	.685	.775	.90		
550		16.5	.153	430	431	432	433	434	435	436	437		8	8
600		18.0	.316	438	439	440	441	442	443	444	445	446	9	17
690		20.7	.600	447	448	449	450	451	452	453	454	455	9	26
765		22.95	.840	456	457	458	459	460	461	462	463	464	9	35
792		23.76	.925	465	466	467	468	469	470	471	472	473	9	44

TABLE VII. EXTERNAL TANK PRESSURE TAP NUMBERS

VIEW FWD LOOKING AFT



$X_T$ IN. Fuel Scale	$X_{TN}$ IN. Model Scale	$X_T/L_T$	$\phi \sim 2$ DEGREES																NO TAPS
			0	30	60	90	120	135	147	162	180	198	213	225	240	270	300	330	
248/329	8.937/9.527	0	474																1
346	10.38	0.0092	475	476	477	478	479		480		481		482		483	484	485	486	12
363	10.89	0.0164	487	488	489	490	491	492	493	494	495	496	497	498	499	500	501	502	16
403	12.09	0.0406	503	504	505	506	507	508	509	510	511	512	513	514	515	516	517	518	16
443	13.44	0.0644	519	520	521	522	523	524	525	526	527	528	529	530	531	532	533	534	16
568	17.04	0.1294	535	536	537	538	539	540	541	542	543	544	545	546	547	548	549	550	16
688	20.64	0.1944	551	552	553	554	555	556	557	558	559	560	561	562	563	564	565	566	16
718	21.54	0.2106	567	568	569	570	571	572	573	574	575	576	577	578	579	580	581	582	16
758	22.74	0.2323	583	584	585	586	587	588	589	590	591	592	593	594	595	596	597	598	16
803	24.24	0.2594	599	600	601	602	603	604	605	606	607	608	609	610	611	612	613	614	16
850	25.50	0.2821	615	616	617	618	619	620	621	622	623	624	625	626	627	628	629	630	16
950	28.50	0.3362	631	632	633	634	635	636	637	638	639	640	641	642	643	644	645	646	16
1050	31.50	0.3904	647	648	649	650	651	652	653	654	655	656	657	658	659	660	661	--	16
1150	34.50	0.4445	663	664	665	666	667	668	669	670	671	672	673	674	675	676	677	678	16
1250	37.50	0.4987	679	680	681	682	683	684	685	686	687	688	689	690	691	692	693	694	16
1350	40.50	0.5528	695	696	697	698	699	700	701	702	703	704	705	706	707	708	709	710	16
1500	45.00	0.6340	711	712	713	714	715	716	717	718	719	720	721	722	723	724	725	726	16
1700	51.00	0.7423	727	728	729	730	731	732	733	734	735	736	737	738	739	740	741	742	16
1900	57.00	0.8506	743	744	745	746	747	748	749	750	751	752	753	754	755	756	757	758	16
2040	61.20	0.9264	759	760	761	762	763	764	765	766	767	768	769	770	771	772	773	774	16
2146	64.38	0.9838	775	776	777	778	779		780		781		782		783	784	785	786	12
STING CAVITY			787																1
$L_T = 1846.91$ IN.																			314
																			2 TAPS

 $L_T = 1846.91$  IN.

2 TAPS 314

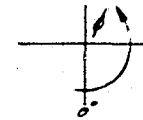
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63

TABLE VIII LEFT SRB PRESSURE TAP NUMBERS

VIEW FWD LOOKING AFT



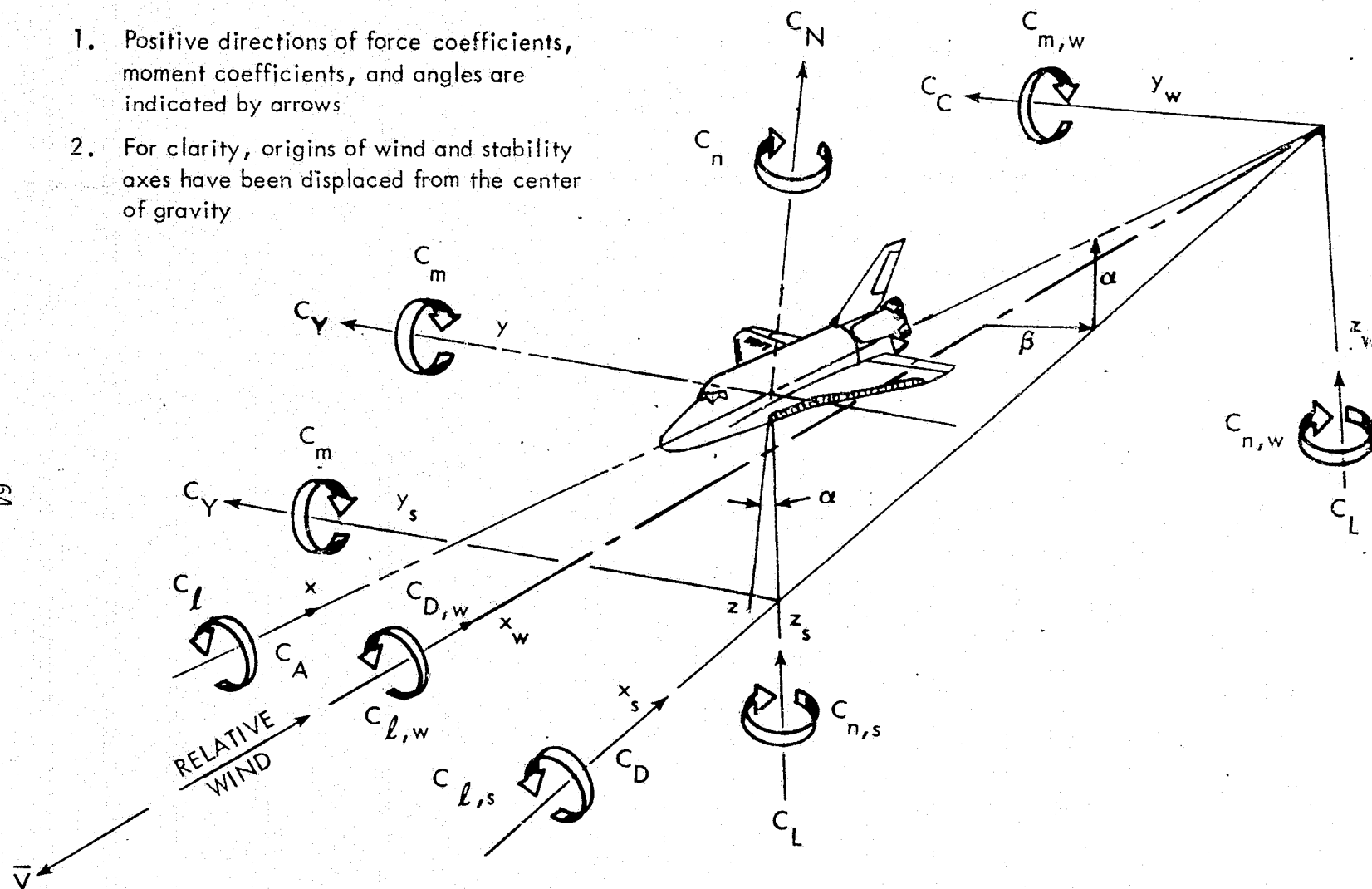
$X_s \sim$ IN. FULL SCALE	$X_s \sim$ IN. MODEL SCALE	$X_s / L_s$	$\phi \sim$ DEGREES										NO. TAPS	$\Sigma$ NO TAPS
			0	45	90	135	180	225	270	315				
200	6	0	788										1	1
260	7.8	0.0335	789	790	791	792	793	794	795	796			8	9
370	11.1	0.0950	797	798	799	800	801	802	803	804			8	17
400	12.0	0.1118	805	806	807	808	809	810	811	812			8	25
450	13.5	0.1397	813	814	815	816	817	818	819	820			8	33
550	16.5	0.1956	821	822	823	824	825	826	827	828			8	41
700	21.0	0.2794	829	830	831	832	833	834	835	836			8	49
850	25.5	0.3632	837	838	839	840	841	842	843	844			8	57
1050	31.5	0.4250	845	846	847	848	849	850	851	852			8	65
1250	37.5	0.5867	853	854	855	856	857	858	859	860			8	73
1450	43.5	0.6985	861	862	863	864	865	866	867	868			8	81
* 1503	45.09	0.7280	869		870		871		872				4	85
* 1505	45.15	0.7290	873		874		875		876				4	89
* 1517	45.51	0.7360	877		878		879		880				4	93
* 1519	45.57	0.737	881		882		883		884				4	97
1650	49.5	0.8102	885	886	887	888	889	890	891	892			8	105
1750	52.5	0.8661	893	894	895	896	897	898	899	900			8	113
1840	55.2	0.9170	901	902	903	904	905	906	907	908			8	121
* 1850	55.5	0.9220	909		910		911		912				4	125
* 1852	55.56	0.9230	913		914		915		916				4	129
1890	56.7	0.9443	917	918	919	920	921	922	923	924			8	137
1930	57.9	0.9667	925	926	927	928	929	930	931	932			8	145
SKIRT BASE			933			934			935				3	148
NOZZLE BASE			936										1	149

$L_s = 1789.60$  IN.

\* PRESSURE TAPS AT 77.5 IN. RADIUS ON THE STRUCTURAL RINGS

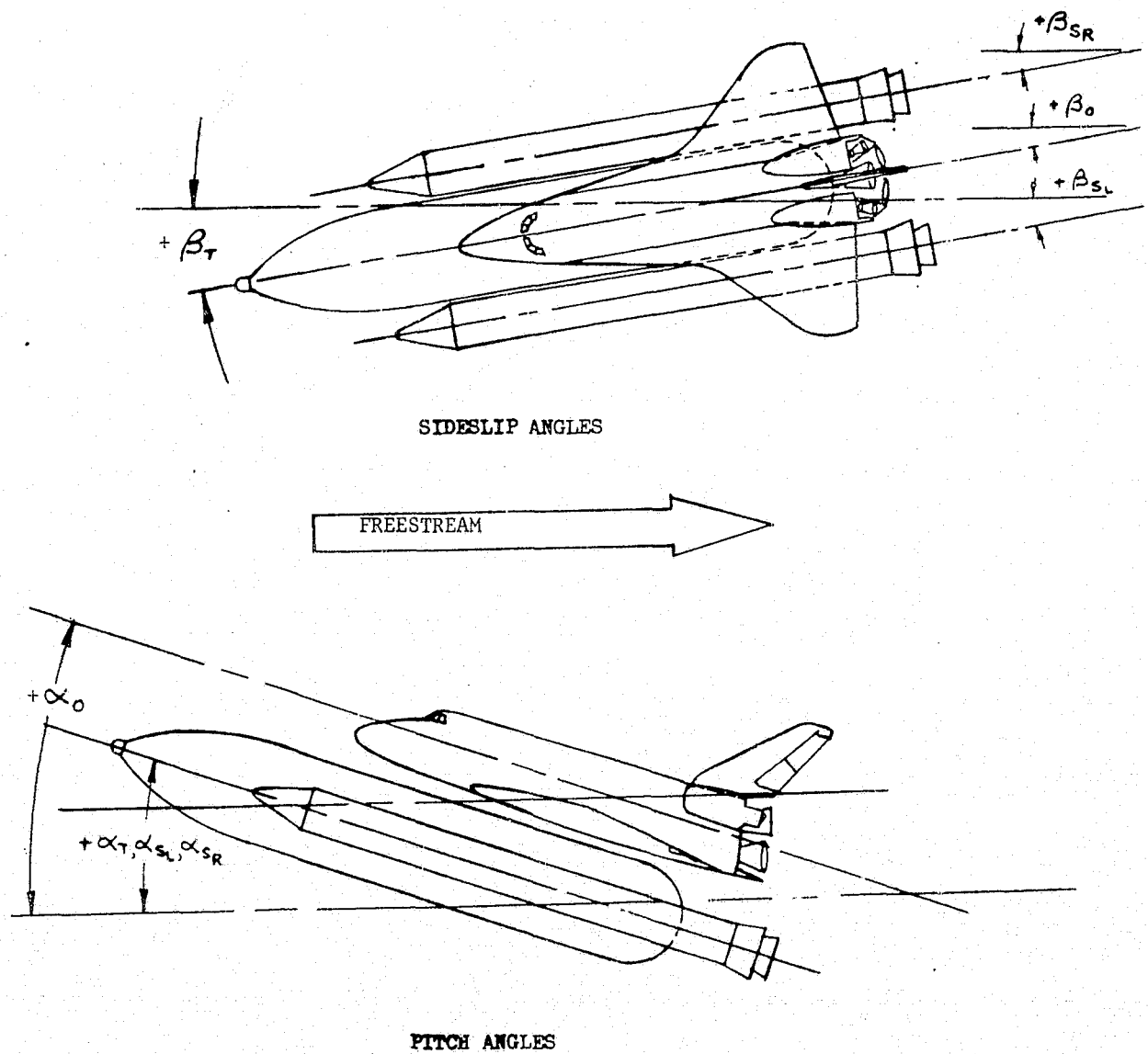
# Notes:

1. Positive directions of force coefficients, moment coefficients, and angles are indicated by arrows
2. For clarity, origins of wind and stability axes have been displaced from the center of gravity



a. Forces and Moments  
Figure 1. - Axis Systems.

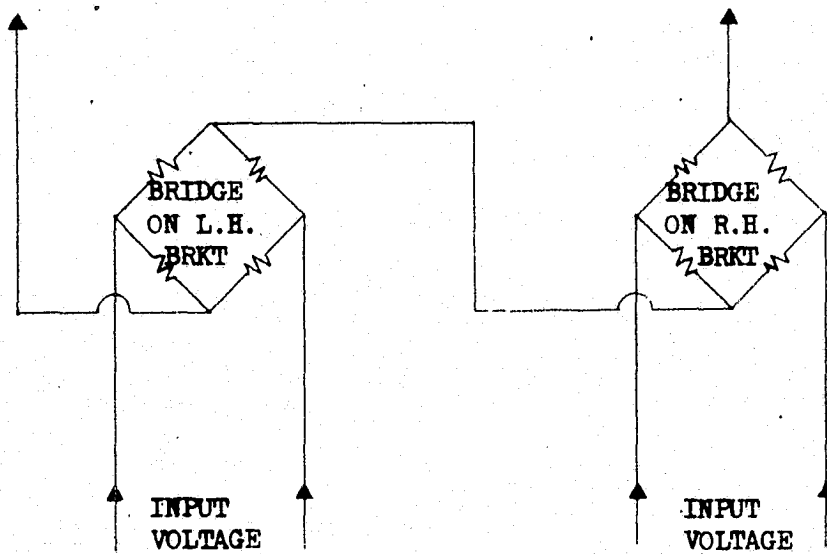




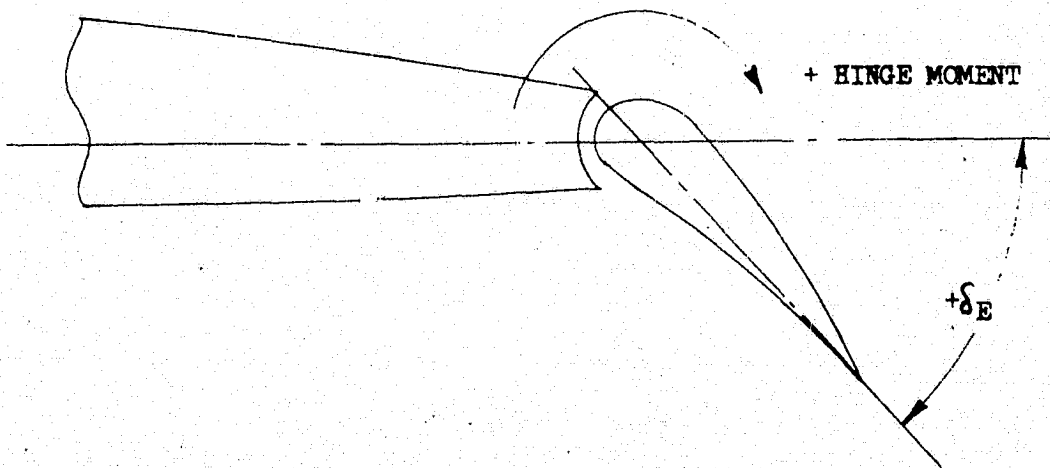
b. Model Attitude Definition

Figure 1. - Continued.

OUTPUT VOLTAGE



ELEVON HINGE MOMENT WIRING DIAGRAM  
TYPICAL FOR INBOARD AND OUTBOARD ELEVONS



c. Elevon Electrical Hookup and Sign Conventions

Figure 1. - Concluded.

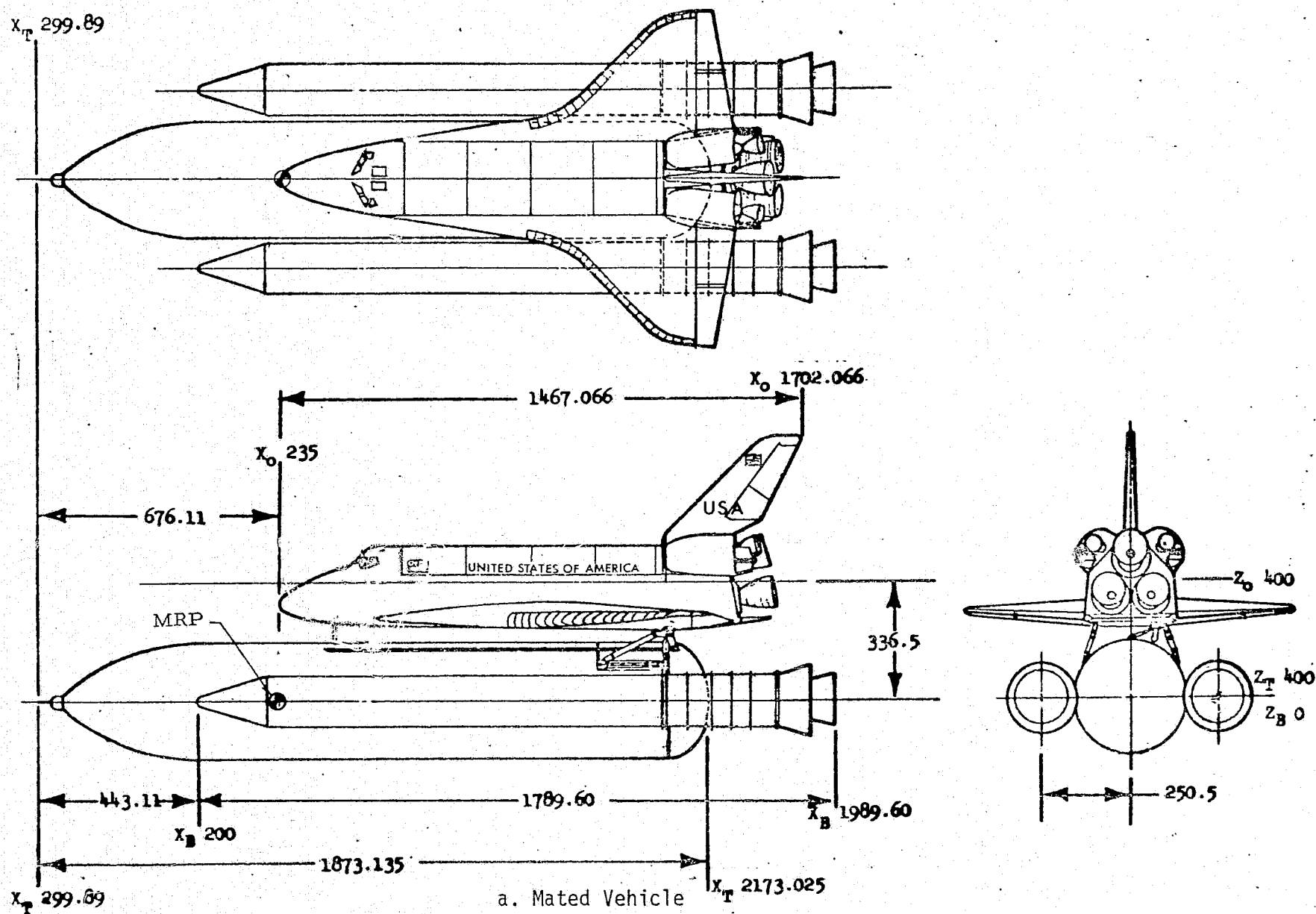
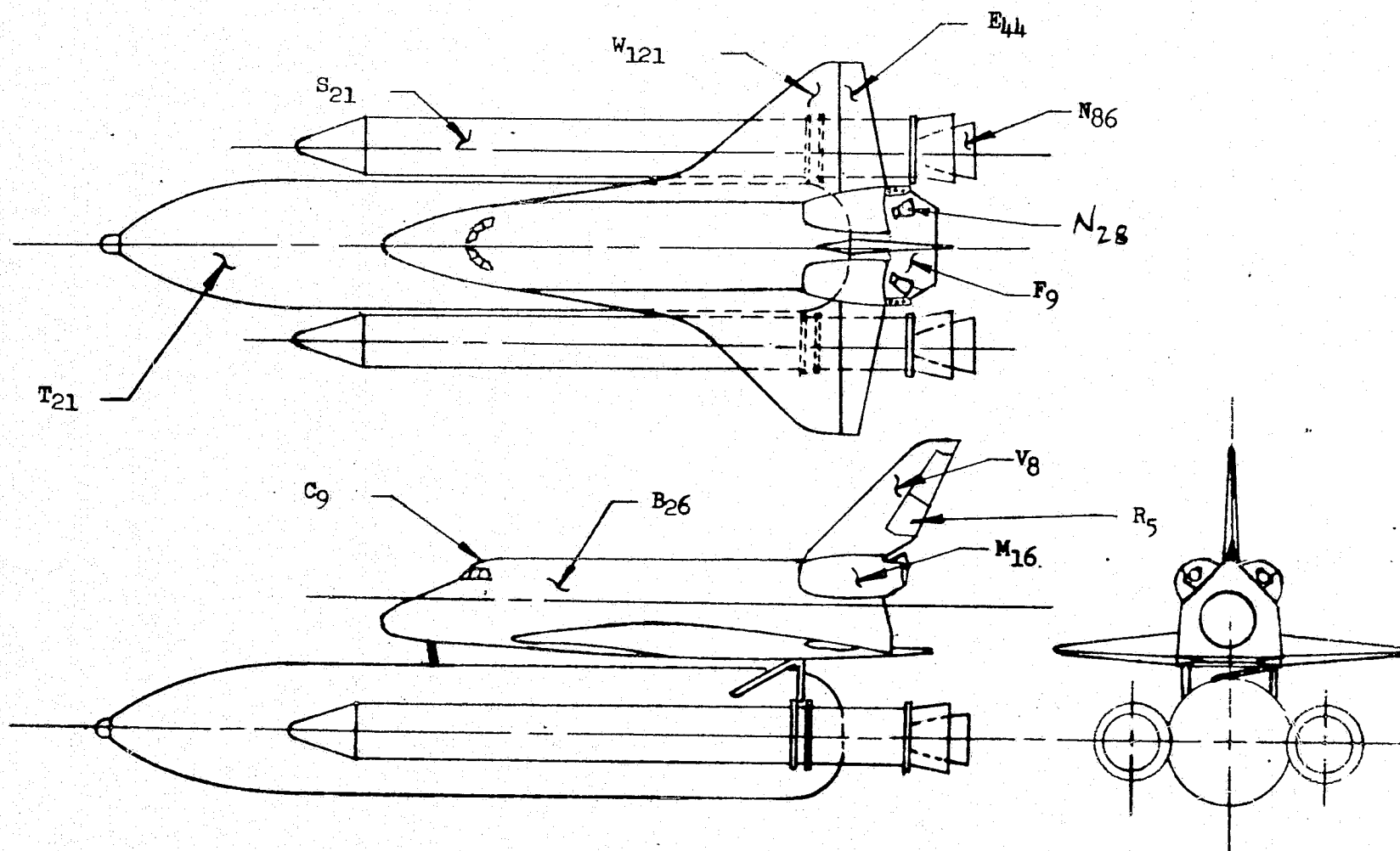
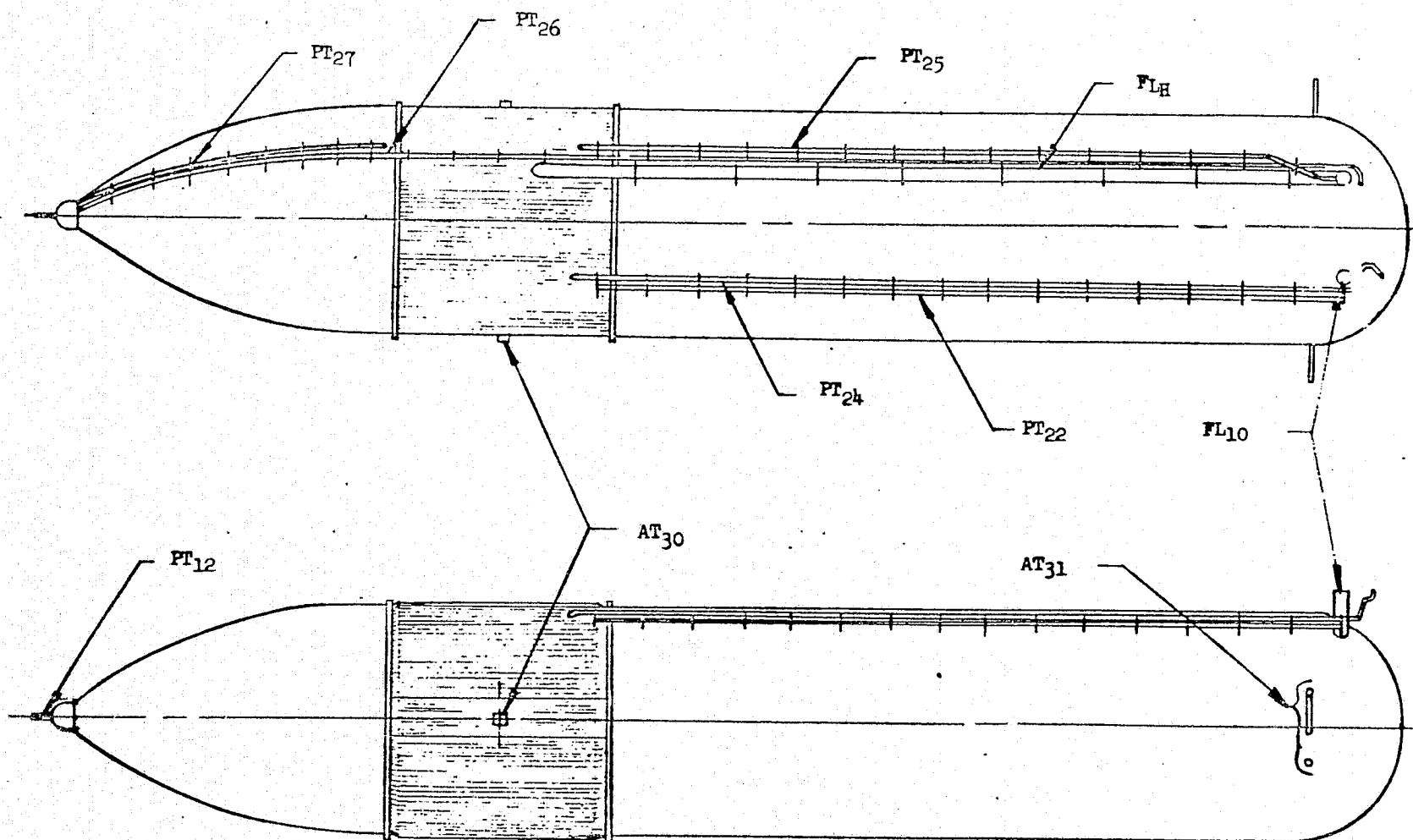


Figure 2. - Model sketches.



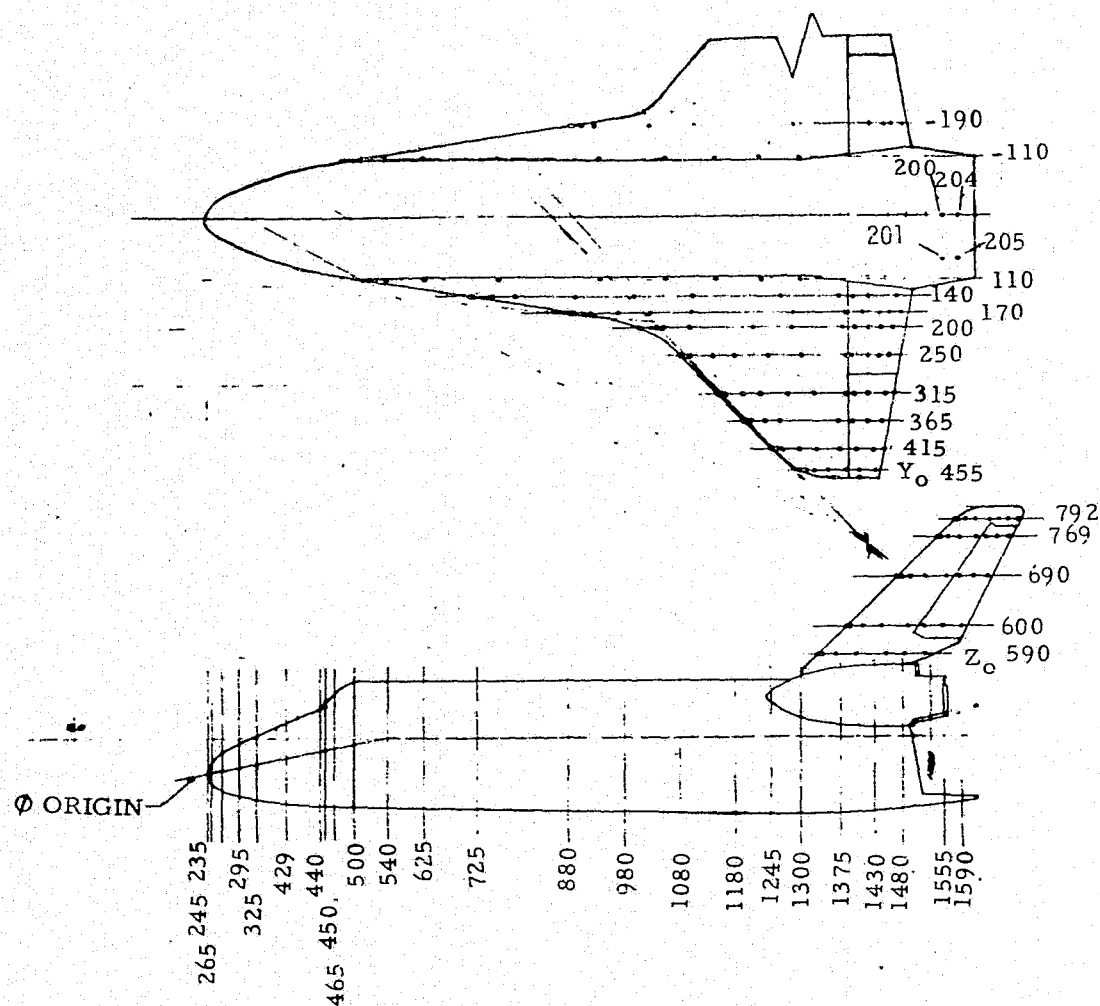
b. LVA Integrated Vehicle Three View

Figure 2. - Continued.

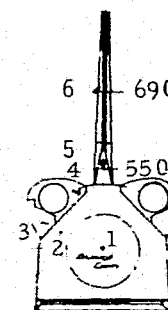
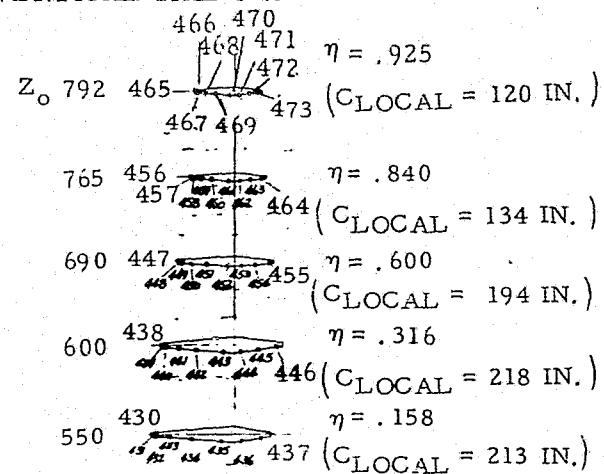


c. (T<sub>28</sub>) External Tank Protuberances

Figure 2. - Continued.



# VERTICAL TAIL ORIFICE LOCATION

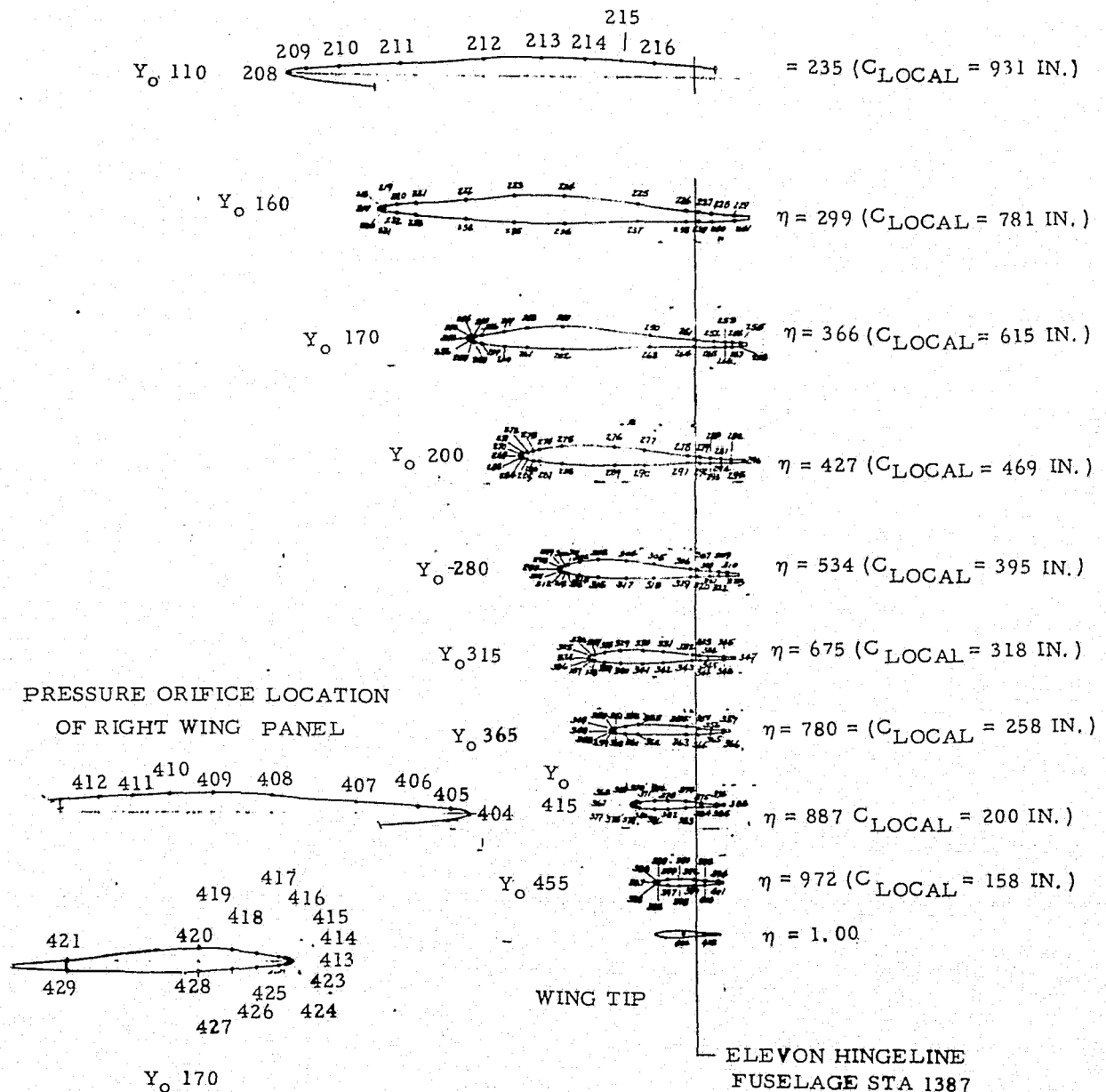


ORBITER BASE  
VIEW LOOKING FORWARD

d. Orbiter Upper Wing and Vertical Tail Pressure Tap Locations

Figure 2. - Continued.

# PRESSURE ORIFICE LOCATION OF LEFT WING PANEL



e. Orbiter Wing Pressure Tap Locations

Figure 2. - Continued.

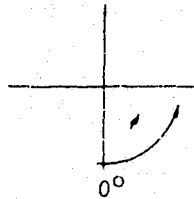
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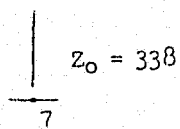
# FUSELAGE ORIFICE LOCATION

NOTE:

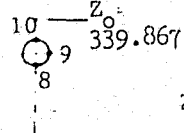
VIEW LOOKING AFT



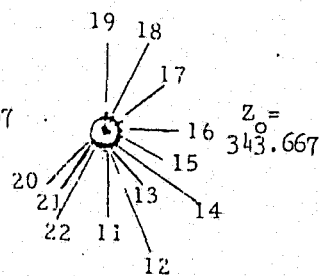
FUS STA 235



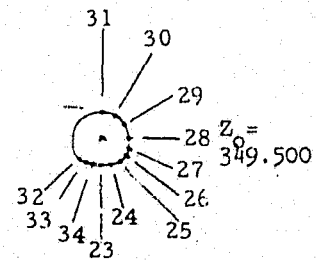
FUS STA 245



FUS STA 265



FUS STA 295

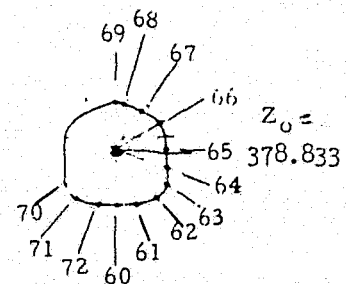
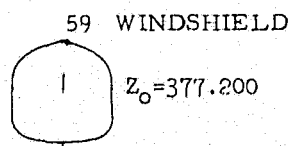
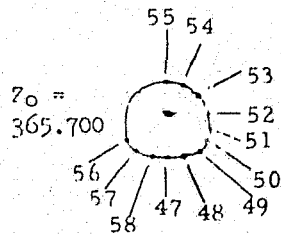
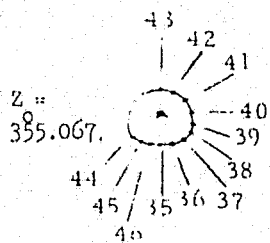


FUS STA 325

FUS STA 380

FUS STA 440

FUS STA 450

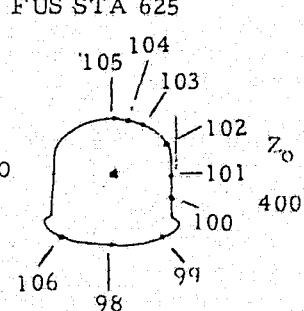
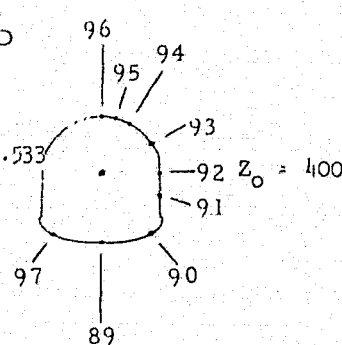
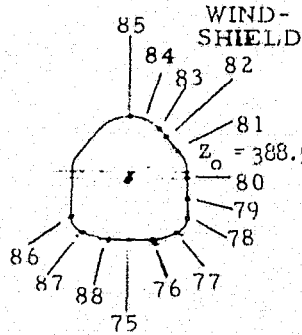
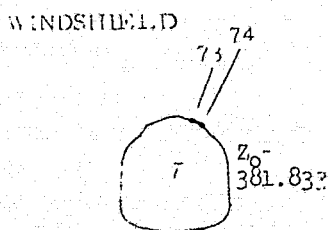


FUS STA 465

FUS STA 500

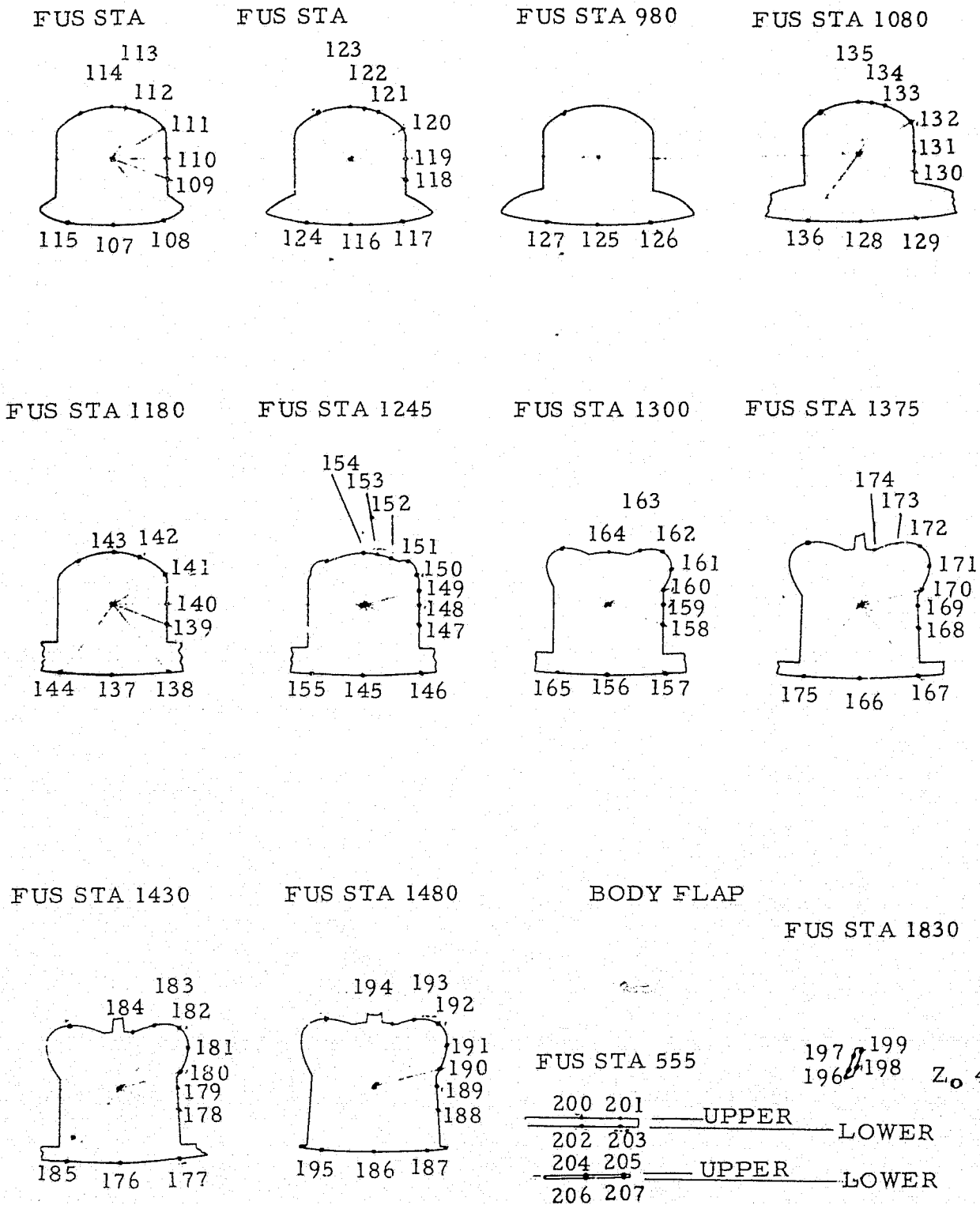
FUS STA 560

FUS STA 625



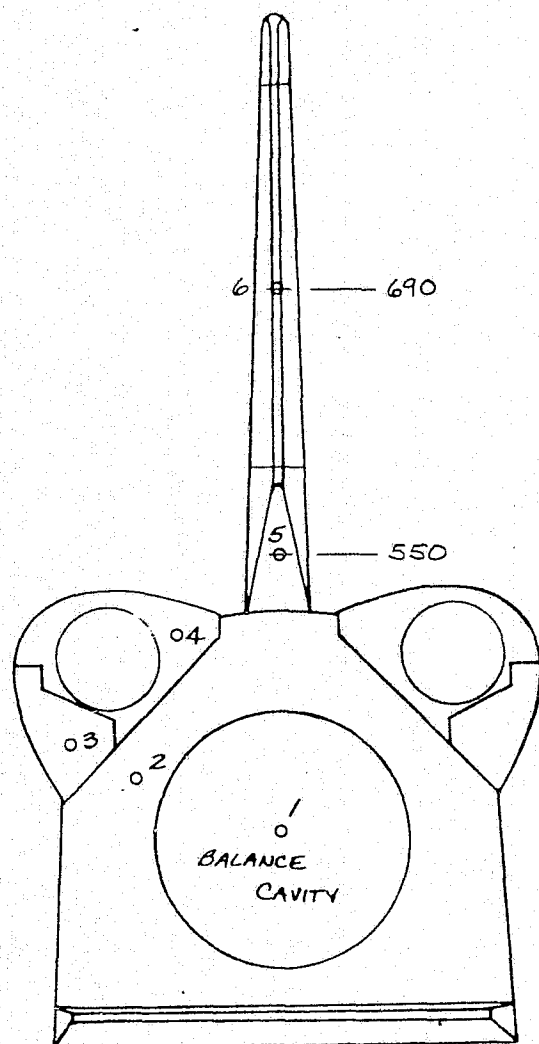
f. Orbiter Forward Fuselage Pressure Tap Locations

Figure 2. - Continued.



FUS STA 590  
g. Orbiter Aft Fuselage Pressure Tap Locations

Figure 2. - Continued.



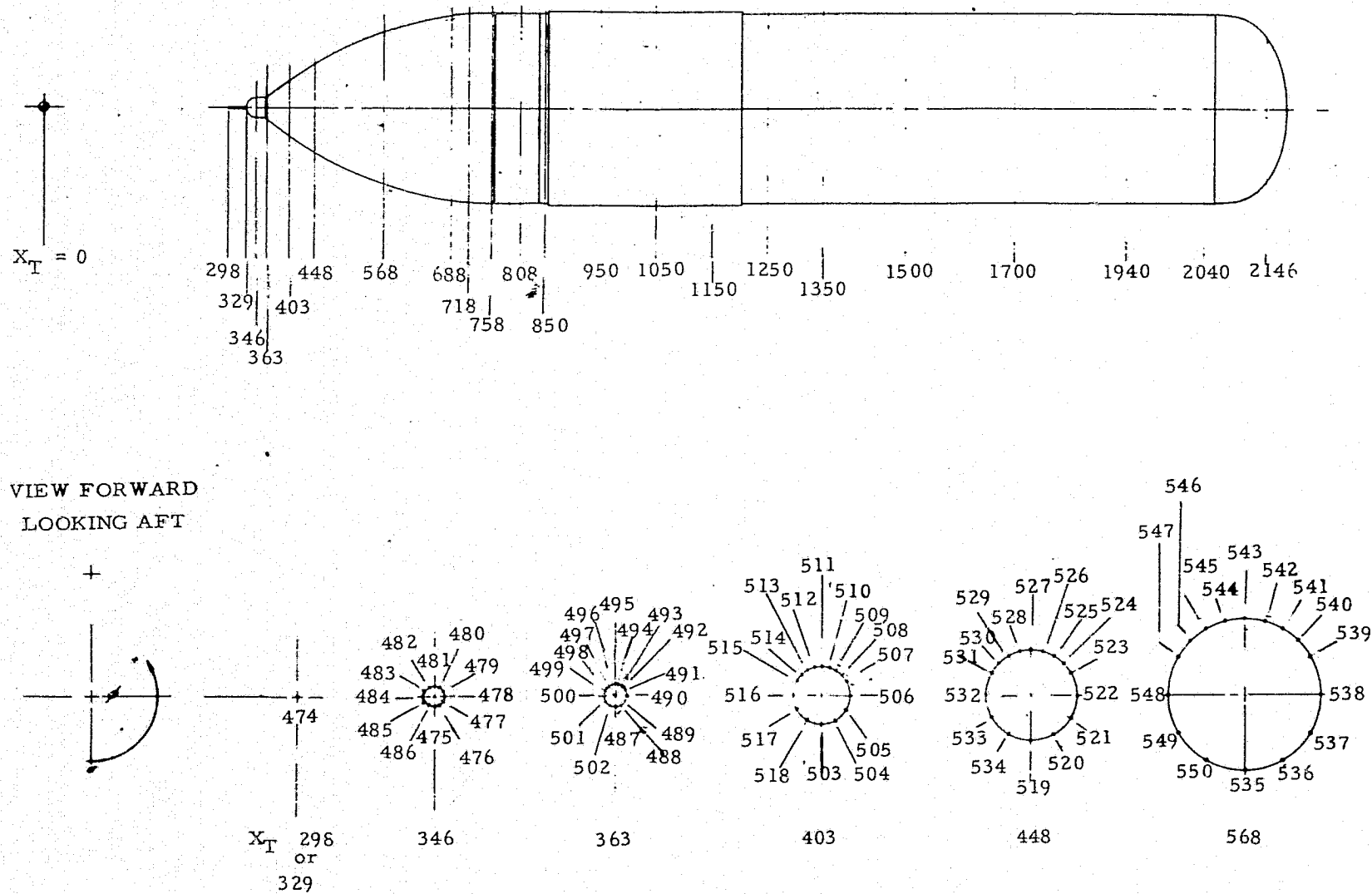
ORBITER BASE PRESSURE TAPS

## BODY FLAP PRESSURE TAP NUMBERS

ORBITER ~ X <sub>0</sub>		φ ~ DES.		NO. TAPS	Σ NO TAPS
FULL SCALE	MODEL SCALE	X <sub>0</sub> /L <sub>0</sub>	0		
1555 <sub>U</sub>	46.65		200	2	2
1555 <sub>L</sub>	46.65		202	2	4
1590 <sub>U</sub>	47.70		204	2	6
1590 <sub>L</sub>	47.70		206	2	8

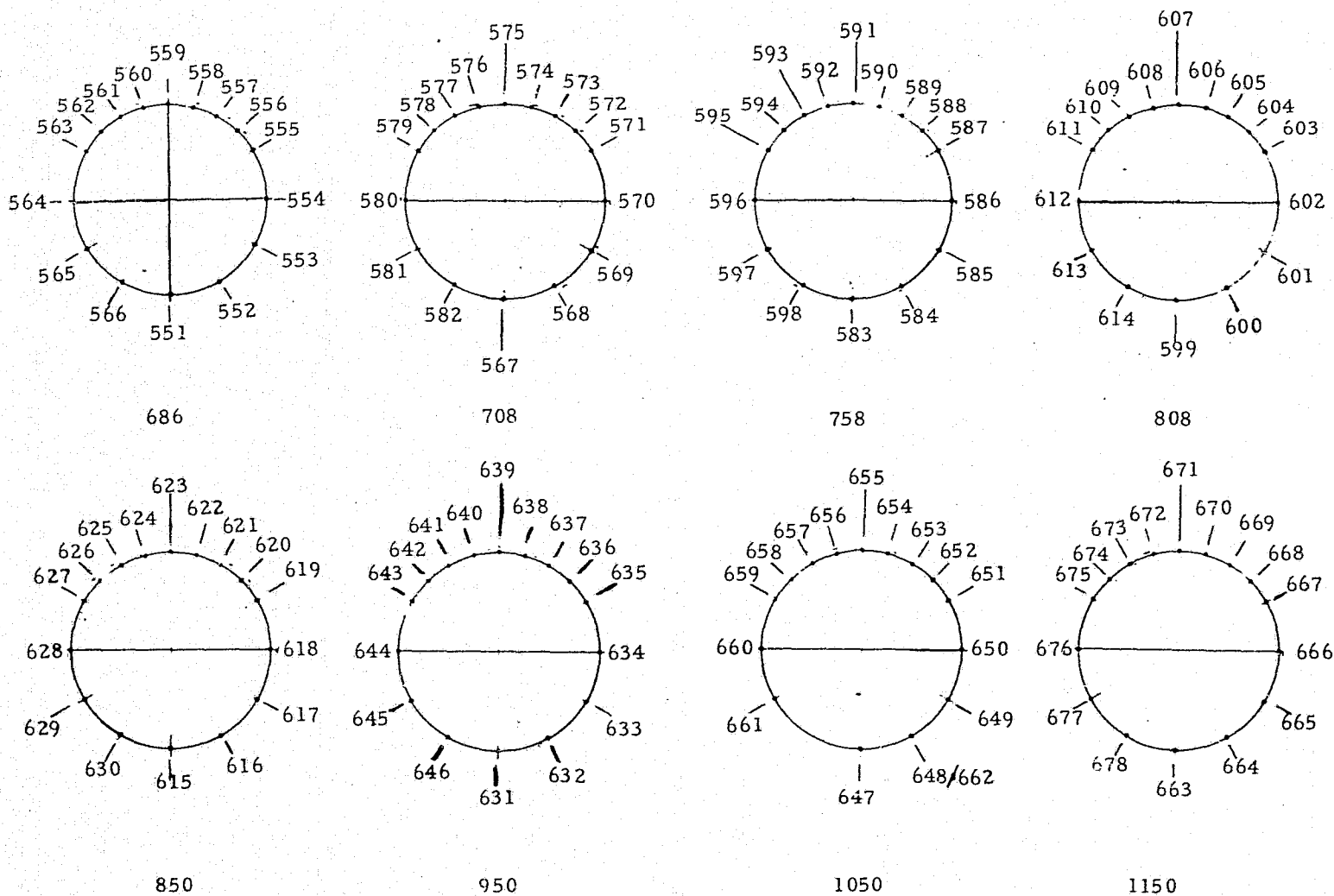
h. Orbiter Base Pressure Tap Locations

Figure 2. - Continued.



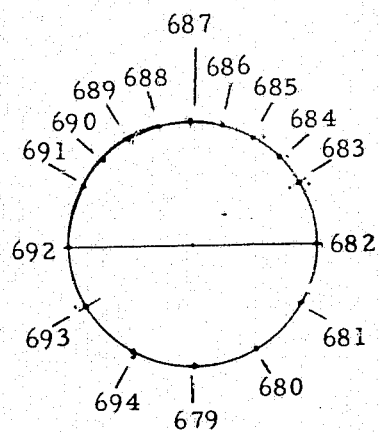
i. External Tank Forward Pressure Tap Locations

Figure 2. - Continued.

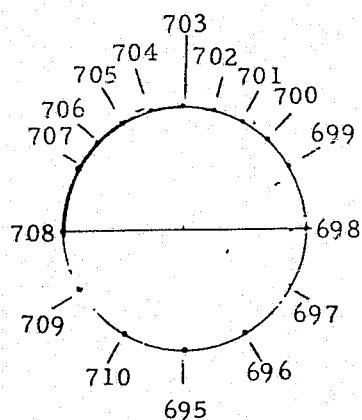


j. External Tank Mid Pressure Tap Locations

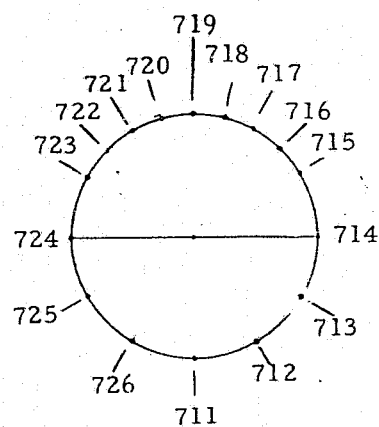
Figure 2. - Continued.



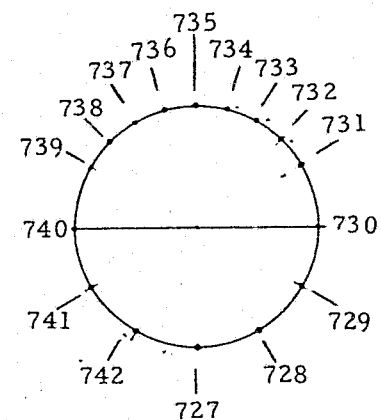
1250



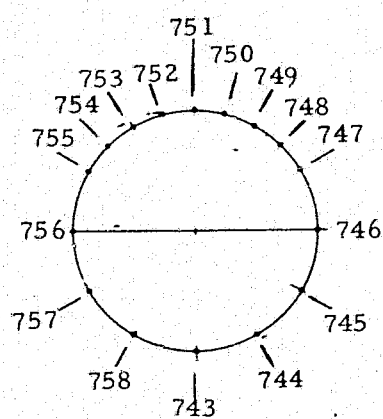
1350



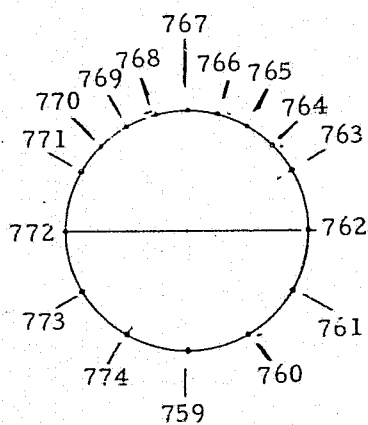
1500



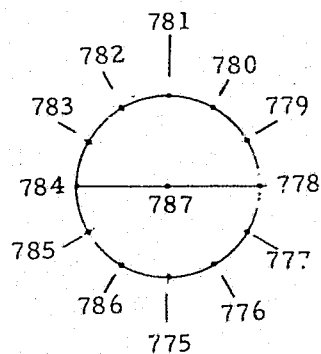
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1900

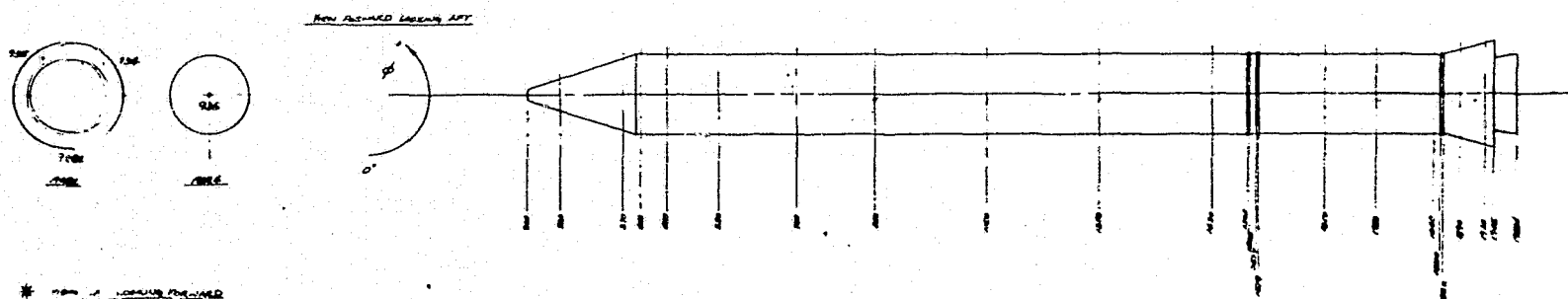
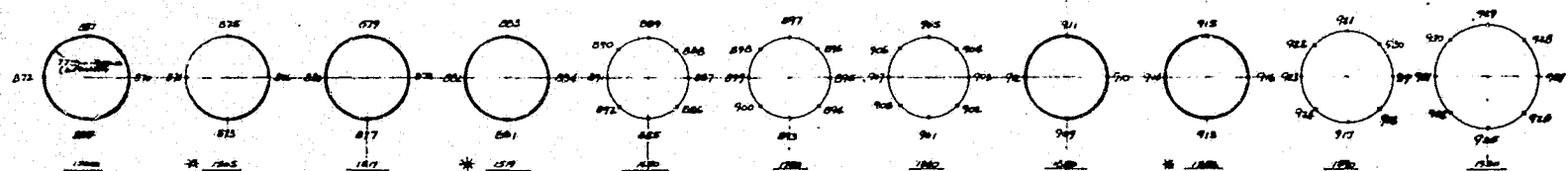


2040



k. External Tank Aft Pressure Tap Locations

Figure 2. - Continued.

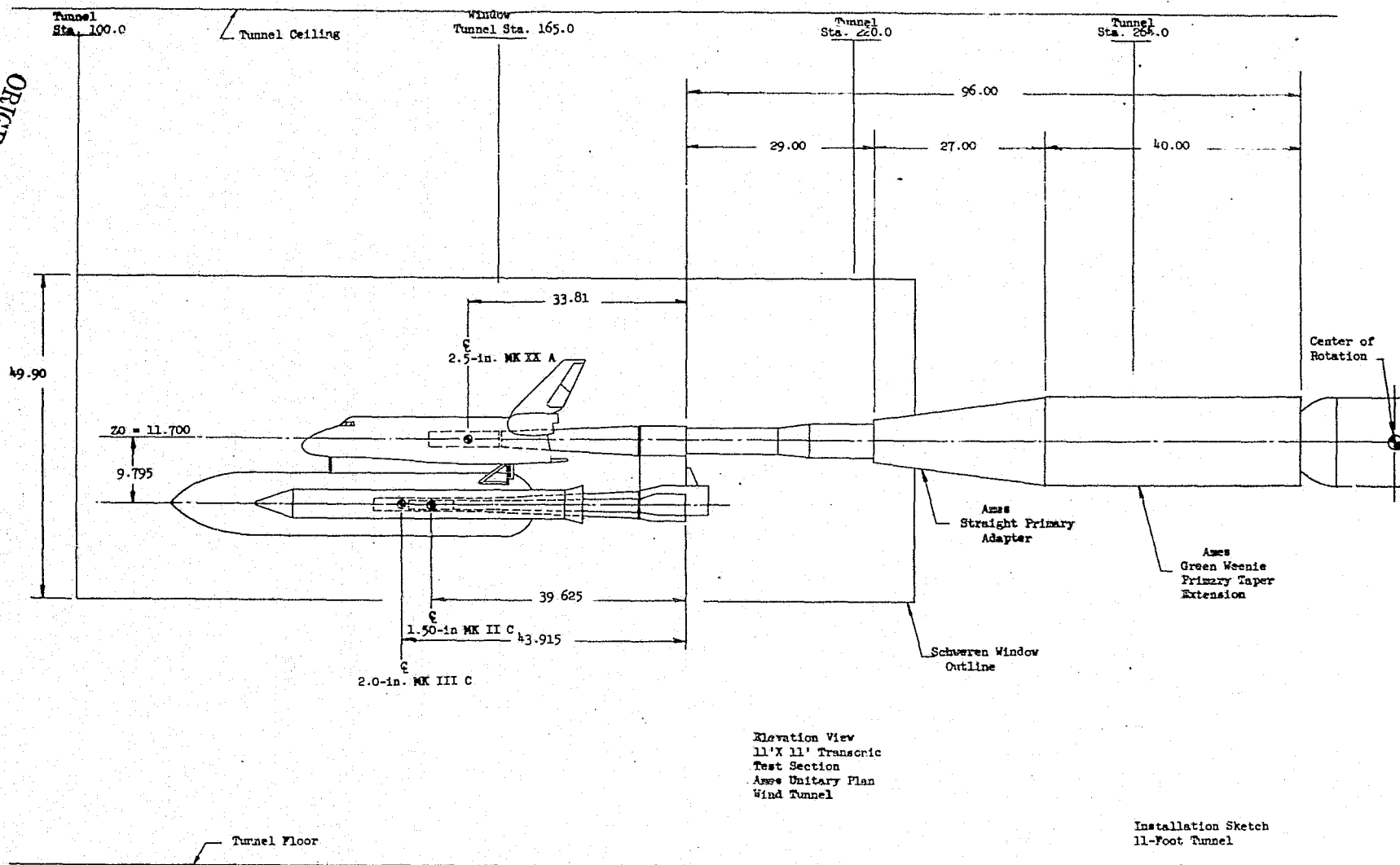


## 1. SRB Pressure Tap Locations

Figure 2. - Continued.

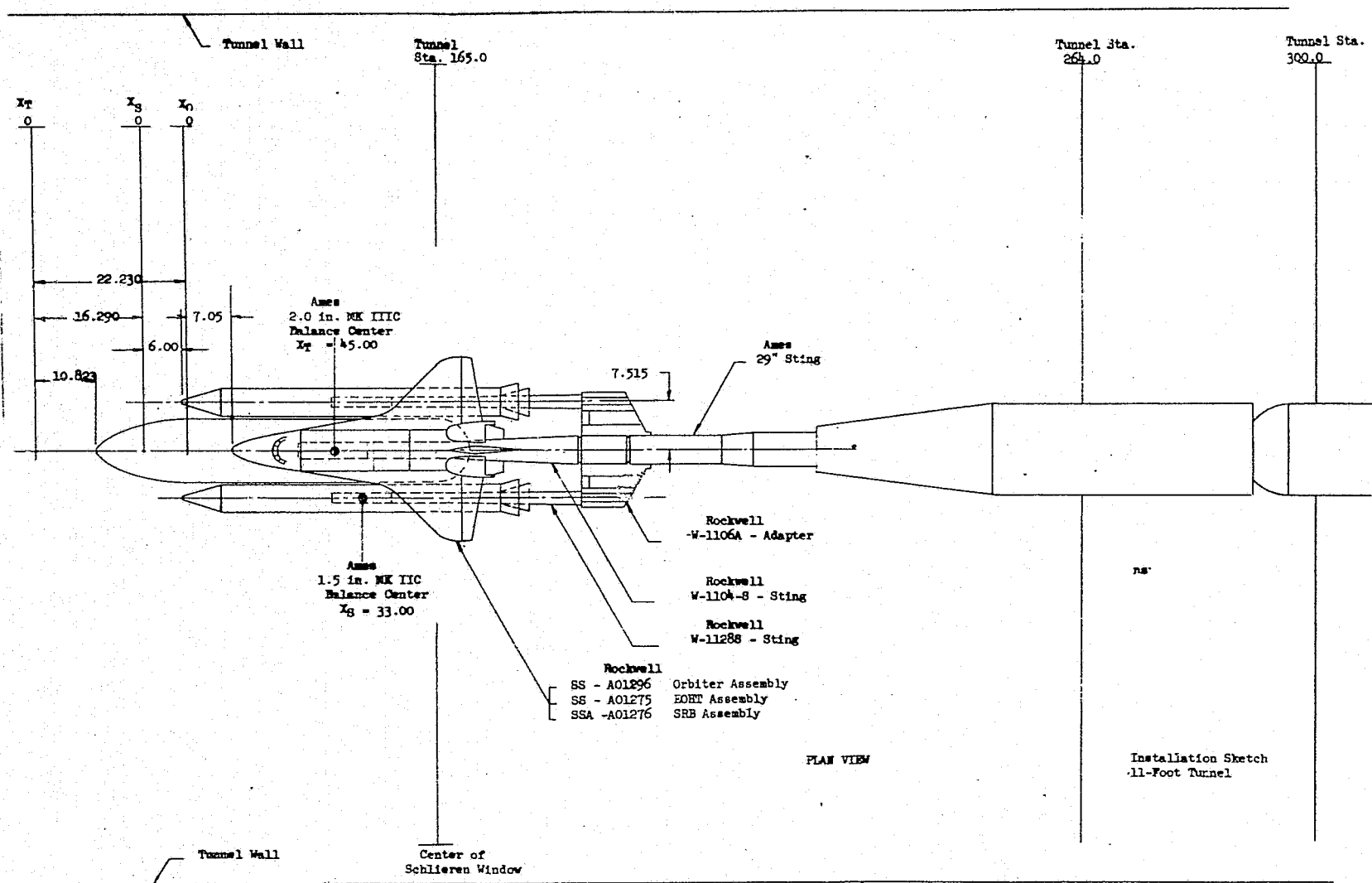


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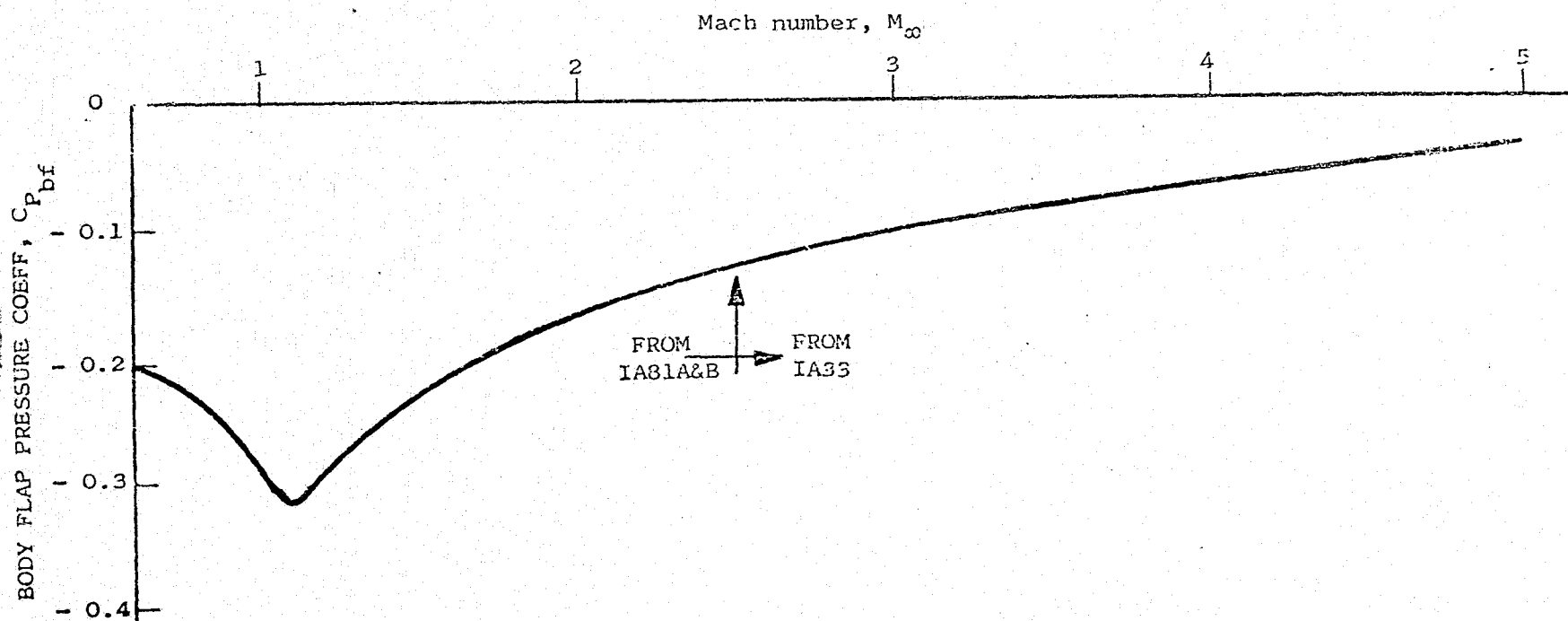
m. Model Installation Side View

Figure 2. - Continued.



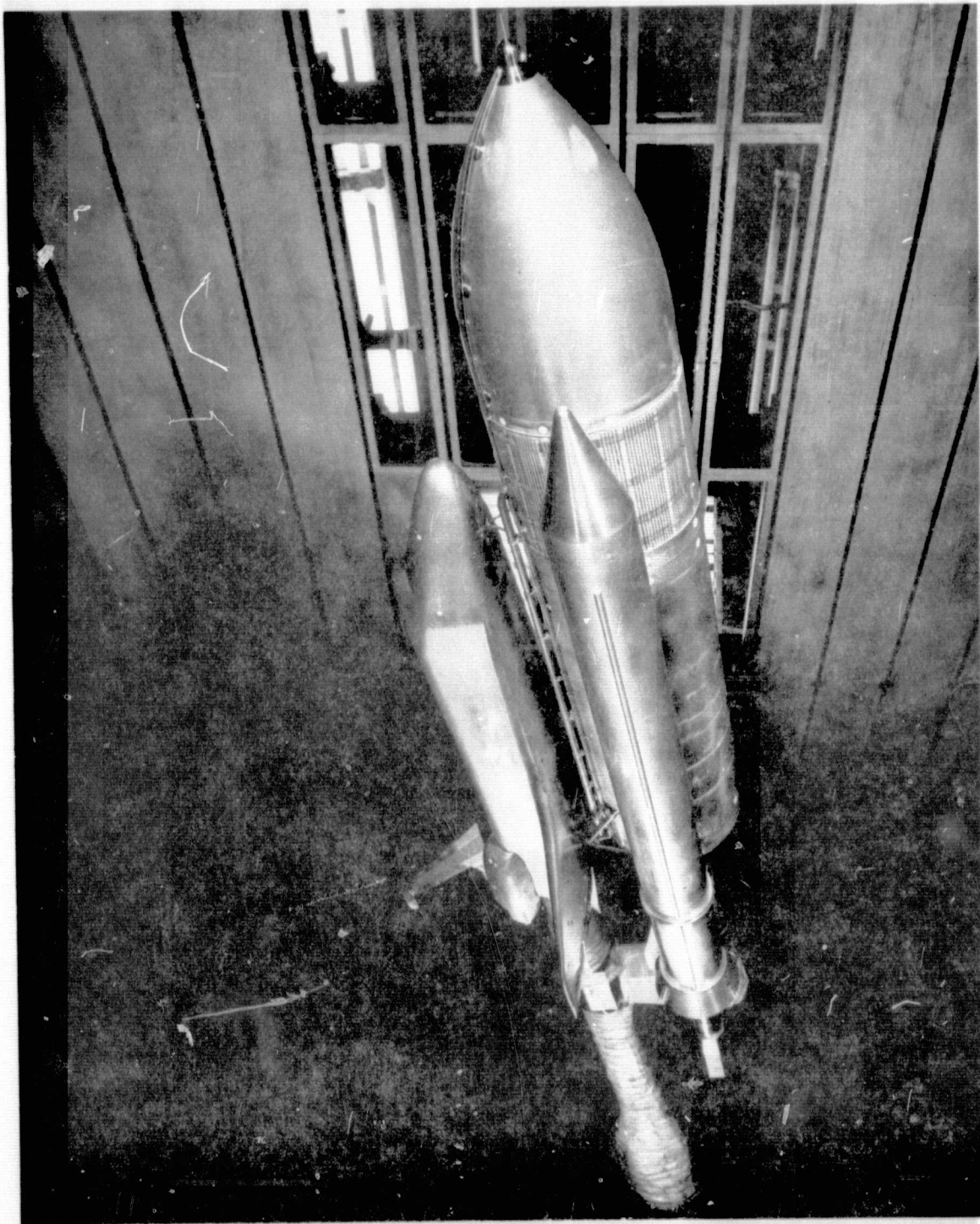
n. Model Installation Top View

Figure 2. - Continued.



o. Orbiter Body Flap Pressure Coefficients

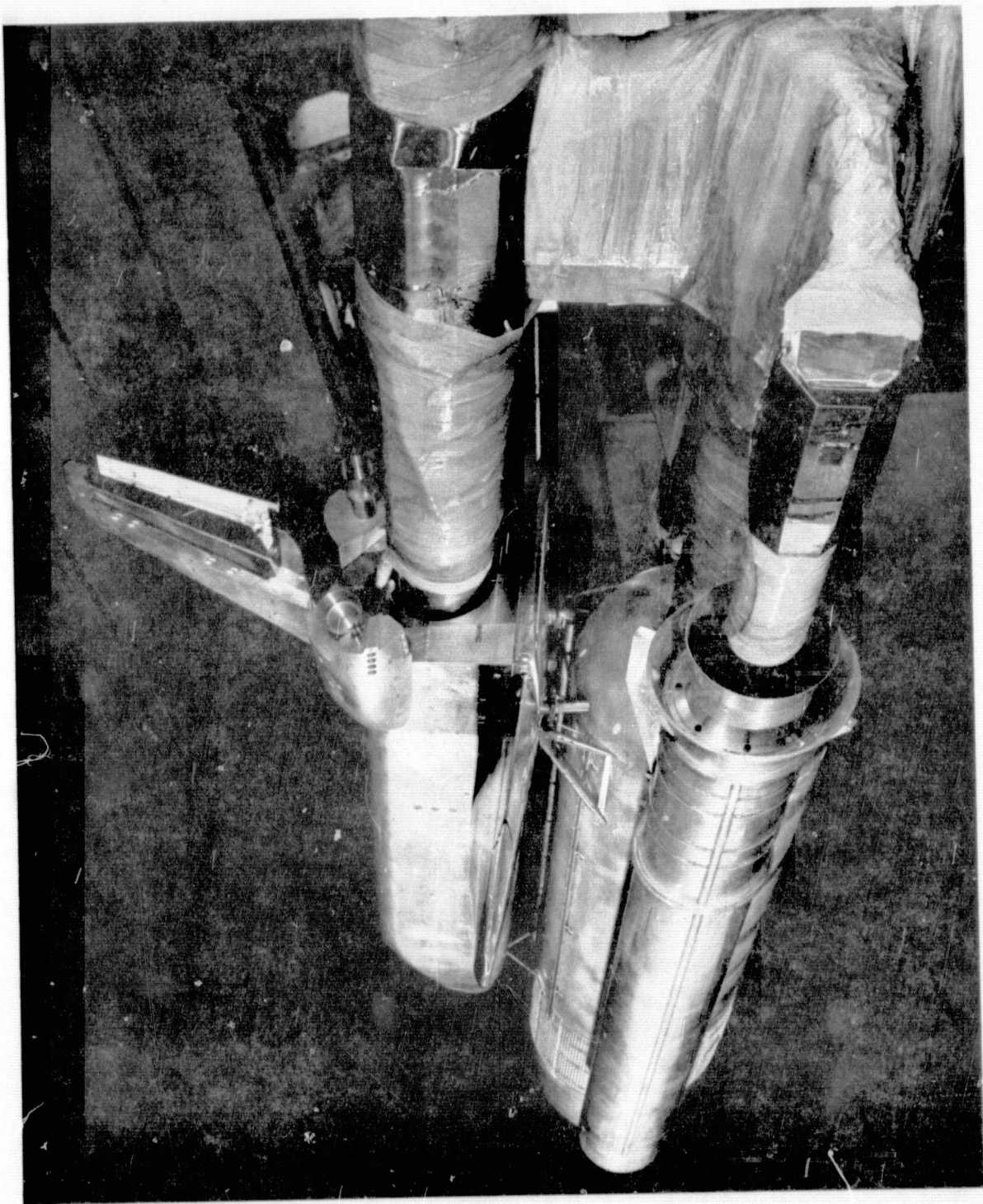
Figure 2. - Concluded.



a. Side View

Figure 3. - Model photographs.

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b. Rear View

Figure 3. - Concluded.

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APPENDIX  
TABULATED SOURCE DATA

Tabulations of plotted data are available on request from  
Data Management Services.

DATE 20 OCT 75

## IA81A - PRESSURE SOURCE DATA TABULATION

PAGE 1

ARC11-019 IA81 LVAP(SBHL UNSEALD) ORB. FUSELAGE

(RETB01) ( 02 OCT 74 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 976.0000 IN. XT  
 LREF = 1297.0000 INCHES YMRP = .0000 IN. YT  
 BREF = 1297.0000 INCHES ZMRP = 400.0000 IN. ZT  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

MACH = 1.100 RN/FT = 3.000  
 ELV-18 = .000 ELV-08 = .000  
 RUDDER = .000 SPOBRK = 55.000

BETA0 ( 1 ) = .005 ALPHA0 ( 1 ) = -6.286

## SECTION ( 1 ) ORBITER FUSELAGE

## DEPENDENT VARIABLE CP

X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.3330	.7454		.3362	.3362	.9263		-.4118		-.0644	-.1749	-.1495	-.1497	-.0631	.0661
20.000				.3303	.3171	.4806		-.3948		-.0647					
40.000				.3237	.2870	.2768		-.4395		-.4354	-.1022	-.1977	-.3204	-.0629	.1052
55.000				.3538	.2826	.2214		-.0949		-.2881					
70.000				.3671	.2732	.2361		.0044		-.1897	-.5966	-.3366	-.2436	-.1162	
90.000		.7521		.4000	.2816	.2562		.0639		-.1961	-.5344	-.5497	-.2102	-.1170	
120.000				.5007	.3911	.4109		.3038		-.1861	-.4390	-.6867	-.2801	-.1366	
140.000										-.2793					
150.000			.6900	.5637	.4926	.5165				-.4505	-.5418	-.3345	-.2809	-.1400	
151.000									.4474						
156.000									.7515						
162.000									.5155						
165.000										-.4733	-.4786	-.2571	-.2819	-.1374	
169.000								.8507							
174.000							.9836								
180.000	1.3330	.3865	.6715	.5798	.5282	.5632		.8374		-.4717	-.5710	-.2364	-.2781	-.1380	
305.000			.5209	.3661	.3235	.2224		-.1864		-.3018					
320.000			.4439	.3252	.3294	.2928		-.5016		-.1211	-.3435	-.1542	-.2017	-.0659	.0735
340.000			.4298	.3237	.3485	.5012		-.5364		-.0093					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1323	.0899	.3178	.1092	-.3393	-.3253	-.3194		-.2757	-.2812					
40.000	.1021	.1941	.1916	-.1862	-.3771	-.3258	-.2994		-.2724	-.2648					
70.000	.0717	.1586	.2360	.2875	.0289	-.0727	-.1068								
90.000	.0756	.1052	.2849	.3061	-.0377	-.1303	-.1296								
105.000			.3451	.2400	-.1275	-.1788	-.1819								
110.000								-.3549							
120.000	.0868	.2260	.3875	.1961	-.1982	-.2146	-.2644	-.3091							
135.000			.4792	.4989	-.0928	-.1025	-.1464								
150.000	.0845	.2824	.4991	.5534	.0276	-.0356	-.1291								
165.000	.0745		.4988		.2257	.0244	-.2933								
180.000	.0779	.2974	.5019	.6946											
320.000	.0830	.1911	.2847	-.0448	-.3164	-.3017	-.3053								

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ARC11-019 IAB1 LVAP(SBHL UNSEALD) ORB. FUSELAGE

(RETB01)

BETA0 ( 1 ) = -.006 ALPHA0 ( 2 ) = -4.148

## SECTION ( 1 ) ORBITER FUSELAGE

## DEPENDENT VARIABLE CP

X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.3195	.7563		.3158	.3158	.9092		-.4195		-.0580	-.1668	-.1330	-.1496	-.0444	.0833
20.000				.3118	.2983	.4737		-.3995		-.0392					
40.000				.3085	.2709	.2685		-.4337		-.3052	-.1056	-.1681	-.2991	-.0472	.1259
55.000				.3376	.2638	.2134		-.0925		-.2732					
70.000				.3490	.2527	.2251		.0057		-.1780	-.5856	-.3252	-.2555	-.1091	
90.000		.7309		.3797	.2608	.2469		.0678		-.1823	-.5346	-.5383	-.2173	-.1142	
120.000				.4727	.3604	.3929		.3063		-.1818	-.4365	-.6830	-.2490	-.1177	
140.000										-.2697					
150.000			.6449	.5211	.4504	.4886				-.4775	-.5630	-.3792	-.2985	-.1222	
151.000									.4402						
156.000								.7424							
162.000									.5030						
165.000										-.4820	-.5041	-.2908	-.3028	-.1207	
169.000								.8348							
174.000						.9690									
180.000	1.3195	.3813	.6265	.5343	.4835	.5304		.8201		-.4970	-.5889	-.2697	-.3007	-.1202	
305.000			.5144	.3500	.3076	.2136		-.1810		-.2665					
320.000			.4423	.3097	.3107	.2845		-.4976		-.0525	-.3399	-.1281	-.1616	-.0418	.0944
340.000			.4261	.3061	.3268	.4970		-.5138		-.0045					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1487	.1120	.3128	.1088	-.3296	-.3155	-.3125		-.2584	-.2616					
40.000	.1246	.2060	.1989	-.1353	-.3714	-.3190	-.2818		-.2549	-.2549					
70.000	.1254	.1770	.1967	.2593	.0195	-.0757	-.1079								
90.000	.0565	-.0332	.2500	.2583	-.0405	-.1272	-.1317								
105.000			.3194	.2335	-.1297	-.1834	-.1830								
110.000								-.3390							
120.000	.0679	.1517	.3531	.1256	-.1923	-.2177	-.2677	-.2862							
135.000			.4332	.4466	-.1044	-.1198	-.1579								
150.000	.0712	.2206	.4577	.4876	.0104	-.0602	-.1432								
165.000	.0724		.4605		.2147	.0004	-.2796								
180.000	.0765	.2386	.4620	.6345											
320.000	.0783	.2049	.2902	-.0213	-.3053	-.2945	-.2870								

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## IA81A - PRESSURE SOURCE DATA TABULATION

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ARC11-019 IA81 LVAP(SBHL UNSEALD) ORB. FUSELAGE

(RETB01)

BETA0 ( 1 ) = -.021 ALPHA0 ( 3 ) = -2.025

SECTION ( 1 ) ORBITER FUSELAGE		DEPENDENT VARIABLE CP													
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.3138	.7618		.2718	.2673	.8906		-.4425		-.0710	-.1460	-.1331	-.1169	-.0375	.0971
20.000				.2708	.2490	.4596		-.4579		-.0598					
40.000				.2758	.2231	.2486		-.4376		-.1388	-.1013	-.1486	-.2674	-.0454	.1392
55.000				.3103	.2206	.1897		-.0974		-.2739					
70.000				.3199	.2076	.1951		.0004		-.1838	-.5911	-.3120	-.2648	-.1274	
90.000		.7045		.3493	.2158	.2197		.0640		-.1827	-.5499	-.5055	-.2347	-.1327	
120.000				.4267	.3123	.3579		.3034		-.1858	-.4545	-.6919	-.2338	-.1292	
140.000										-.2734					
150.000			.5905	.4657	.3949	.4445				-.5049	-.6069	-.4328	-.3285	-.1094	
151.000									.4206						
156.000								.7280							
162.000									.4804						
165.000										-.5089	-.5446	-.3360	-.3392	-.1035	
169.000								.8157							
174.000							.9424								
180.000	1.3138	.3549	.5630	.4699	.4251	.4825		.7985		-.5912	-.6242	-.3135	-.3402	-.1035	
305.000			.4951	.3148	.2711	.1874		-.1848		-.2764					
320.000			.4197	.2688	.2729	.2579		-.5075		-.0530	-.3283	-.1098	-.1452	-.0314	.1057
340.000			.3961	.2599	.2864	.4777		-.5355		-.0104					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1689	.1327	.3246	.1133	-.3533	-.3222	-.3035		-.2703	-.2710					
40.000	.1479	.2215	.2238	-.0837	-.3844	-.3272	-.2888		-.2515	-.2413					
70.000	.1484	.1976	.1344	.2253	-.0020	-.0934	-.1271								
90.000	.0336	-.0975	.1838	.2149	-.0453	-.1422	-.1525								
105.000			.2725	.2142	-.1375	-.2011	-.2085								
110.000								-.3196							
120.000	.0352	.0812	.3350	.1289	-.1777	-.2356	-.2822	-.2969							
135.000			.3731	.3829	-.1122	-.1423	-.1887								
150.000	.0474	.1650	.3995	.4270	-.0183	-.0883	-.1712								
165.000	.0698		.4044		.1949	-.0234	-.2792								
180.000	.0716	.1770	.4155	.5717											
320.000	.0706	.2390	.3086	.0180	-.3085	-.3056	-.2891								

ARC11-019 IA81 LVAP(SBHL UNSEALD) ORB. FUSELAGE

(RETB01)

BETA0 (1) = -.030 ALPHA0(4) = .092

SECTION (1) ORBITER FUSELAGE		DEPENDENT VARIABLE CP													
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.3307	.7618		.2221	.2215	.8707		-.4301		-.0457	-.0980	-.1056	-.0998	-.0098	.1146
20.000				.2181	.1959	.4440		-.5421		-.0373					
40.000				.2315	.1725	.2243		-.4438		-.1652	-.1061	-.1290	-.1650	-.0321	.1593
55.000				.2804	.1736	.1559		-.1068		-.2589					
70.000				.2850	.1599	.1678		-.0108		-.1787	-.5051	-.2883	-.2353	-.1295	
90.000		.6731		.3116	.1715	.1944		.0570		-.1782	-.5474	-.4192	-.2414	-.1280	
120.000				.3765	.2563	.3309		.2947		-.1952	-.4592	-.7058	-.2236	-.1216	
140.000										-.2840					
150.000			.5367	.3996	.3311	.4066				-.5306	-.6665	-.4790	-.3285	-.0951	
151.000									.4122						
156.000								.7133							
162.000									.4668						
165.000										-.5392	-.5729	-.3793	-.3569	-.0890	
169.000								.7966							
174.000						.9295									
180.000	1.3307	.2936	.5023	.4105	.3641	.4409		.7748		-.6657	-.6492	-.3555	-.3602	-.0872	
305.000			.4779	.2863	.2281	.1647		-.1988		-.2631					
320.000			.3890	.2303	.2212	.2328		-.5041		-.0525	-.2318	-.0775	-.0839	-.0138	.1263
340.000			.3514	.2146	.2332	.4602		-.4858		.0010					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1885	.1711	.3298	.1120	-.3799	-.3268	-.3052		-.2590	-.2653					
40.000	.1730	.2456	.2425	-.0202	-.4531	-.3326	-.2930		-.2515	-.2465					
70.000	.1624	.2293	-.0427	.1919	-.0208	-.1103	-.1520								
90.000	.0210	-.1279	.0824	.1804	-.0723	-.1648	-.1801								
105.000			.1831	.1614	-.1709	-.2256	-.2496								
110.000								-.3168							
120.000	.0347	.0372	.2737	.2097	-.1929	-.2580	-.2906	-.2937							
135.000			.3232	.4009	-.0789	-.1611	-.2077								
150.000	.0446	.1491	.3339	.4201	-.0153	-.1070	-.1872								
165.000	.0736		.3514		.1700	-.0446	-.2665								
180.000	.0804	.1593	.3580	.5118											
320.000	.0835	.2691	.3336	.0591	-.3128	-.3311	-.2716								

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## IAB1A - PRESSURE SOURCE DATA TABULATION

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ARC11-019 IAB1 LVAP(SBHL UNSEALED) ORB. FUSELAGE

(RET801)

BETA0 ( 1 ) = -.026 ALPHA0( 5 ) = 2.226

SECTION ( 1 ) ORBITER FUSELAGE				DEPENDENT VARIABLE CP											
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.3275	.7551		.1828	.1878	.8313		-.3421		-.0213	-.0708	-.0785	-.0682	.0128	.1343
20.000				.1856	.1696	.4241		-.5285		-.0157					
40.000				.2049	.1408	.2007		-.4498		-.1321	-.0919	-.1188	-.0776	-.0275	.1724
55.000				.2596	.1559	.1308		-.1148		-.2570					
70.000				.2634	.1316	.1421		-.0199		-.1726	-.5789	-.2685	-.2292	-.1372	
90.000		.6551		.2827	.1331	.1715		.0509		-.1681	-.5433	-.3418	-.2571	-.1301	
120.000				.3365	.2033	.3042		.2922		-.1993	-.4672	-.7105	-.2372	-.1268	
140.000										-.2900					
150.000			.4865	.3453	.2654	.3624				-.5514	-.6969	-.5183	-.2947	-.0893	
151.000									.4021						
156.000								.7052							
162.000									.4505						
165.000										-.5636	-.6037	-.4176	-.3695	-.0799	
169.000								.7842							
174.000							.9176								
180.000	1.3275	.2488	.4440	.3525	.2982	.3970		.7574		-.7177	-.6773	-.3923	-.3804	-.0787	
305.000			.4565	.2684	.2076	.1390		-.2041		-.2443					
320.000			.3562	.1975	.1917	.2042		-.5037		-.0266	-.1693	-.0533	-.0295	-.0044	.1445
340.000			.3035	.1782	.1976	.4310		-.4305		.0051					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.2048	.1853	.3267	.1139	-.2946	-.3018	-.2818		-.2478	-.2380					
40.000	.1950	.2567	.2559	-.0007	-.3696	-.3200	-.2829		-.2340	-.2320					
70.000	.1944	.2451	-.2143	.1651	-.0451	-.1456	-.1969								
90.000	.0107	-.1651	.0060	.1605	-.1008	-.2044	-.2104								
105.000			.1494	.1570	-.1925	-.2636	-.3014								
110.000									-.3174						
120.000	.0074	-.0108	.2438	.1642	-.2251	-.2925	-.3159		-.3171						
135.000			.2989	.3330	-.1666	-.2038	-.2429								
150.000	.0267	.1184	.3101	.3789	-.0393	-.1404	-.2166								
165.000	.0741		.3256		.1412	-.0821	-.2543								
180.000	.0842	.1296	.3286	.4622											
320.000	.0903	.2828	.3428	.0761	-.3413	-.2836	-.2627								

ARC11-019 IAB1 LVAP(SBHL UNSEALD) ORB. FUSELAGE

(RETB01)

BETA0 ( 1 ) = -.018 ALPHA0( 6 ) = 4.337

SECTION ( 1 ) ORBITER FUSELAGE				DEPENDENT VARIABLE CP											
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.3240	.7507		.1783	.1758	.7810		-.3158		-.0131	-.0617	-.0732	-.0473	.0298	.1531
20.000				.1854	.1573	.4026		-.4256		-.0282					
40.000				.2077	.1517	.1721		-.4500		-.0864	-.0784	-.1182	-.0587	-.0047	.1851
55.000				.2615	.1641	.1088		-.1285		-.2687					
70.000				.2607	.1253	.1190		-.0322		-.1796	-.5254	-.2741	-.2271	-.1504	
90.000		.6415		.2741	.1154	.1467		.0425		-.1720	-.5541	-.3117	-.2821	-.1466	
120.000				.3071	.1677	.2688		.2895		-.2022	-.4979	-.7141	-.2921	-.1449	
140.000										-.2955					
150.000			.4460	.3018	.2210	.3171				-.5676	-.7400	-.5561	-.2908	-.0906	
151.000									3874						
156.000								.7003							
162.000									.4330						
165.000										-.5912	-.6478	-.4575	-.3599	-.0815	
169.000								.7708							
174.000						.9009									
180.000	1.3240	.2099	.3967	.3055	.2494	.3499		.7429		-.7554	-.7184	-.4299	-.3861	-.0776	
305.000			.4465	.2682	.2228	.1206		-.2025		-.1969					
320.000			.3431	.1875	.1946	.1770		-.4916		.0283	-.1546	-.0407	-.0212	.0084	.1612
340.000			.2769	.1616	.1946	.4084		-.3969		-.0006					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.2272	.2009	.3441	.1161	-.2935	-.2866	-.2655		-.2326	-.2348					
40.000	.2153	.2713	.2749	-.0004	-.3838	-.3001	-.2561		-.2179	-.2114					
70.000	.2155	.2571	-.2507	.1372	-.0567	-.1741	-.2163								
90.000	-.0094	-.2219	-.0106	.1242	-.1196	-.2282	-.2340								
105.000			.1545	.1197	-.2000	-.2937	-.3279								
110.000								-.3418							
120.000	-.0289	-.0489	.2480	.1139	-.2399	-.3132	-.3438	-.3182							
135.000			.2883	.3591	-.1909	-.2282	-.2727								
150.000	-.0124	.1000	.3129	.3578	-.0997	-.1699	-.2468								
165.000	.0547		.3167		.1141	-.1052	-.2786								
180.000	.0659	.1109	.3147	.4713											
320.000	.0689	.3015	.3459	.0862	-.3097	-.2937	-.2521								

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## 1A81A - PRESSURE SOURCE DATA TABULATION

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ARC11-019 1A81 LVAP(SBHL UNSEALD) ORB. FUSELAGE

(RETB01)

BETA0 ( 1 ) = -.001 ALPHA0( 7 ) = 6.460

SECTION ( 1 ) ORBITER FUSELAGE				DEPENDENT VARIABLE CP											
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.3181	.7294		.1595	.1728	.7079		-.2649		.0169	-.0539	-.0467	-.0220	.0614	.1707
20.000				.1663	.1538	.3774		-.3255		-.0136					
40.000				.1957	.1591	.1465		-.4233		-.0098	-.0892	-.0981	-.0390	.0363	.1948
55.000				.2632	.1799	.0938		-.1238		-.1908					
70.000				.2566	.1343	.1057		-.0283		-.1639	-.4068	-.2772	-.2221	-.1563	
90.000		.6221		.2501	.1041	.1365		.0141		-.1497	-.5306	-.3162	-.2891	-.1551	
120.000				.2746	.1304	.2474		.2931		-.1945	-.5003	-.6327	-.3505	-.1530	
140.000										-.2911					
150.000			.4033	.2561	.1660	.2832				-.5746	-.7621	-.5889	-.2922	-.0863	
151.000									.3886						
156.000								.6956							
162.000									.4275						
165.000										-.6153	-.6719	-.4879	-.3094	-.0744	
169.000								.7602							
174.000							.8876								
180.000	1.3181	.1569	.3485	.2623	.1927	.3137		.7288		-.7833	-.7357	-.4590	-.3247	-.0690	
305.000			.4440	.2711	.2332	.1149		-.1939		.0456					
320.000			.3159	.1738	.1947	.1685		-.4272		.0707	-.1400	-.0194	-.0012	.0346	.1755
340.000			.2345	.1449	.1847	.3862		-.3335		.0143					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.2390	.2160	.3453	.1257	-.3211	-.2839	-.2766		-.2310	-.2300					
40.000	.2266	.2848	.2909	.0024	-.4058	-.2864	-.2515		-.2172	-.2152					
70.000	.2253	.2696	-.3622	.0816	-.0867	-.2038	-.2276								
90.000	-.0228	-.2645	-.1062	.0501	-.1473	-.2421	-.2591								
105.000			.1027	.0681	-.2229	-.3179	-.3587								
110.000								-.2818							
120.000	-.0533	-.0963	.1935	.0919	-.2469	-.3384	-.3720	-.3227							
135.000			.2302	.3618	-.2030	-.2606	-.3016								
150.000	-.0378	.0263	.2629	.3856	-.1115	-.2083	-.2757								
165.000	.0477		.2776		.0888	-.1402	-.2816								
180.000	.0625	.0456	.2878	.5058											
320.000	.0686	.3044	.3456	.0685	-.2875	-.2901	-.2420								

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## IABIA - PRESSURE SOURCE DATA TABULATION

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ARC11-019 IAB1 LVAP(SBHL UNSEALED) ORB. FUSELAGE

(RETB01)

BETA0 ( 1 ) = .009 ALPHA0 ( 8 ) = 8.583

SECTION ( 1 ) ORBITER FUSELAGE		DEPENDENT VARIABLE CP													
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.3259	.6484		.1658	.1668	.6194		-.1795		.0243	-.0347	-.0207	.0061	.0837	.1895
20.000				.1562	.1422	.3438		-.2610		-.0133					
40.000				.1919	.1523	.1170		-.3664		-.0214	-.0825	-.0703	-.0090	.0624	.2106
55.000				.2838	.1911	.0600		-.1179		-.0232					
70.000				.2703	.1361	.0576		-.0296		-.0768	-.3939	-.2700	-.2052	-.1826	
90.000		.6163		.2625	.1924	.0844		.0471		-.1294	-.4560	-.3171	-.2692	-.1704	
120.000				.2526	.0999	.1981		.2958		-.1900	-.4883	-.6195	-.4113	-.1722	
140.000										-.2901					
150.000			.3694	.2220	.1198	.2237				-.5784	-.7881	-.6033	-.2831	-.0776	
151.000									.3812						
156.000								.6916							
162.000									.4163						
165.000										-.6341	-.7039	-.5081	-.2907	-.0598	
169.000							.8721	.7524							
174.000															
180.000	1.3259	.0870	.3118	.2256	.1428	.2628		.7187		-.8024	-.7601	-.4808	-.3092	-.0542	
305.000			.4455	.2894	.2426	.0875		-.1831		.1158					
320.000			.2610	.1648	.1817	.1190		-.3311		.0352	-.1288	-.0042	.0148	.0613	.1883
340.000			.1846	.1399	.1776	.3488		-.2653		.0223					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.2562	.2288	.3616	.1301	-.2843	-.2855	-.2664		-.2210	-.2275					
40.000	.2420	.2953	.3018	-.0004	-.3790	-.2853	-.2530		-.2155	-.2178					
70.000	.2410	.2778	-.3905	.0222	-.1067	-.2145	-.2205								
90.000	-.0334	-.2889	-.2014	.0123	-.1764	-.2470	-.2550								
105.000			.0447	.0565	-.2420	-.3195	-.3579								
110.000								-.2557							
120.000	-.0644	-.1213	.1512	.1043	-.2721	-.3419	-.3747	-.3336							
135.000			.1897	.3796	-.2095	-.2758	-.3227								
150.000	-.0614	-.0204	.2235	.4984	-.1235	-.2401	-.3027								
165.000	.0320		.2559		.0623	-.1693	-.2915								
180.000	.0581	.0001	.2798	.5520											
320.000	.0670	.3195	.3526	.0868	-.3096	-.2826	-.2479								





ARC11-019 IA81 LVAP(SBHL SEALED) ORB. FUSELAGE

(RETB02)

BETA0 ( 1 ) = -.020 ALPHA0( 2 ) = -4.065

SECTION ( 1 ) ORBITER FUSELAGE				DEPENDENT VARIABLE CP											
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.1217	.4547		.0276	-.0057	.6250		-.1623		-.1311	-.1113	-.0790	-.0300	.0080	.0370
20.000				.0240	-.0173	-.0539		-.1923		-.1467					
40.000				.0215	-.0391	-.1347		-.2133		-.1859	-.1217	-.0659	-.0314	.0102	.0428
55.000				.0642	-.0170	-.1024		-.1865		-.2183					
70.000				.0769	-.0195	-.0689		-.1937		-.2702	-.2472	-.0946	-.0133	.0370	
90.000		.4674		.1160	-.0035	-.0450		-.1992		-.3182	-.2769	-.1181	-.0238	.0258	
120.000				.2229	.1229	.1171		-.0513		-.3758	-.3099	-.2472	-.0406	.0124	
140.000										-.3997					
150.000			.4170	.2939	.2290	.2381				-.5385	-.2812	-.1185	-.0333	.0182	
151.000									-.0006						
156.000								.4004							
162.000									.0550						
165.000										-1.0397	-.2225	-.1095	-.0344	.0171	
169.000								.5065							
174.000						.6861									
180.000	1.1217	.0793	.3955	.3020	.2714	.2893		.4844		-1.2699	-.2098	-.1055	-.0308	.0124	
305.000			.2277	.0848	.0236	-.1165		-.1897		-.2013					
320.000			.1417	.0259	.0117	-.1438		-.2034		-.1857	-.1381	-.0704	-.0279	.0121	.0366
340.000			.1182	.0161	.0244	-.0359		-.1743		-.1514					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.0385	-.0042	.1469	-.1890	-.2196	-.2474	-.1900			-.1800	-.1622				
40.000	.0009	.0654	.0031	-.2820	-.2228	-.2220	-.1965			-.1786	-.1761				
70.000	.0002	.0143	-.0088	.0837	-.0491	-.0616	-.1017								
90.000	-.0611	-.0788	.0498	.0954	-.1183	-.1124	-.1298								
105.000			.0958	.0968	-.2402	-.1908	-.1698								
110.000								-.2221							
120.000	-.0071	.0495	.1603	.1922	-.3247	-.2578	-.2430	-.2061							
135.000			.2443	.4013	-.2456	-.1630	-.1942								
150.000	.0136	.1067	.2661	.4712	-.1730	-.1511	-.1562								
165.000	.0436		.2657		-.0166	-.1514	-.1888								
180.000	.0491	.1219	.2697	.4929											
320.000	.0000	.0444	.0689	-.3241	-.2598	-.1983	-.1859								

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ARC11-019 1A81 LVAP (SBHL SEALED) ORB. FUSELAGE

(RETB02)

BETA0 (1) = -.028 ALPHA0 (3) = -1.995

SECTION (1) ORBITER FUSELAGE				DEPENDENT VARIABLE CP											
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.1184	.4864		.0325	.0007	.6278		-.1562		-.1296	-.1044	-.0739	-.0277	.0203	.0504
20.000				.0321	-.0159	-.0543		-.1936		-.1452					
40.000				.0296	-.0257	-.1311		-.2055		-.1791	-.1185	-.0620	-.0266	.0257	.0555
55.000				.0685	-.0091	-.1016		-.1828		-.2174					
70.000				.0768	-.0188	-.0649		-.1911		-.2716	-.2511	-.0977	-.0284	.0152	
90.000		.4537		.1075	-.0011	-.0422		-.1947		-.3128	-.2785	-.1322	-.0349	.0116	
120.000				.1999	.0977	.1051		-.0526		-.3916	-.3164	-.2554	-.0461	.0058	
140.000										-.4327					
150.000			.3752	.2533	.1889	.2054				-.5855	-.3092	-.1347	-.0450	-.0021	
151.000									-.0212						
156.000								.3760							
162.000									.0185						
165.000										-1.1105	-.2432	-.1243	-.0469	.0015	
169.000								.4799							
174.000						.6529									
180.000	1.1184	.0973	.3476	.2584	.2253	.2509		.4554		-1.3533	-.2298	-.1192	-.0436	.0004	
305.000			.2434	.0827	.0264	-.1104		-.1886		-.2028					
320.000			.1566	.0343	.0156	-.1378		-.1979		-.1866	-.1284	-.0721	-.0212	.0213	.0504
340.000			.1342	.0238	.0228	-.0346		-.1737		-.1506					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.0540	.0231	.1490	-.1836	-.2146	-.2312	-.2002		-.1782	-.1605					
40.000	.0231	.0815	.0118	-.2691	-.2280	-.2102	-.1980		-.1789	-.1789					
70.000	.0231	.0314	-.0343	.0720	-.0543	-.0605	-.1025								
90.000	-.0948	-.1063	.0305	.0911	-.1251	-.1111	-.1366								
105.000			.0925	.0933	-.2305	-.1845	-.1707								
110.000								-.2286							
120.000	-.0263	.0269	.1587	.1732	-.3111	-.2480	-.2268	-.1890							
135.000			.2296	.3645	-.2547	-.1736	-.1944								
150.000	-.0090	.0885	.2462	.4208	-.1914	-.1664	-.1588								
165.000	.0242		.2473		-.0345	-.1625	-.1861								
180.000	.0318	.0975	.2480	.4703											
320.000	.0000	.0575	.0764	-.3106	-.2579	-.2024	-.1836								

ARC11-019 IA81 LVAP(SBHL SEALED) ORB. FUSELAGE

(RET802)

BETA0 ( 1 ) = -.031 ALPHA0 ( 4 ) = .078

SECTION ( 1 ) ORBITER FUSELAGE		DEPENDENT VARIABLE CP													
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.1172	.5175		.0398	-.0028	.6304		-.1694		-.1286	-.1072	-.0697	-.0218	.0283	.0613
20.000				.0336	-.0122	-.0478		-.1885		-.1423					
40.000				.0408	-.0256	-.1304		-.1990		-.1759	-.1183	-.0589	-.0244	.0297	.0692
55.000				.0730	-.0100	-.0976		-.1777		-.2120					
70.000				.0740	-.0205	-.0644		-.1874		-.2658	-.2583	-.1187	-.0482	-.0052	
90.000		.4336		.0946	-.0158	-.0406		-.1899		-.3185	-.2893	-.1448	-.0521	-.0049	
120.000				.1711	.0788	.0968		-.0528		-.4072	-.3343	-.2639	-.0575	-.0132	
140.000										-.4674					
150.000			.3316	.2032	.1531	.1730				-.6268	-.3408	-.1503	-.0630	-.0190	
151.000									-.0499						
156.000								.3581							
162.000									-.0149						
165.000										-1.2012	-.2734	-.1438	-.0583	-.0139	
169.000								.4523							
174.000							.6322								
180.000	1.1172	.1098	.2946	.2061	.1823	.2101		.4209		-1.4521	-.2532	-.1344	-.0601	-.0154	
305.000			.2438	.0867	.0294	-.1073		-.1838		-.2006					
320.000			.1736	.0459	.0204	-.1405		-.1889		-.1789	-.1274	-.0651	-.0197	.0257	.0645
340.000			.1513	.0307	.0233	-.0359		-.1780		-.1515					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.0653	.0361	.1499	-.1773	-.2230	-.2338	-.2125		-.1867	-.1675					
40.000	.0404	.0850	.0265	-.2559	-.2374	-.2165	-.1942		-.1803	-.1803					
70.000	.0393	.0476	-.0532	.0673	-.0645	-.0653	-.1075								
90.000	-.1384	-.1510	.0135	.0860	-.1331	-.1179	-.1449								
105.000			.0803	.0831	-.2356	-.1908	-.1748								
110.000								-.2338							
120.000	-.0873	.0160	.1560	.1401	-.3056	-.2399	-.2201	-.1902							
135.000			.2159	.3100	-.2695	-.1784	-.1971								
150.000	-.0377	.0727	.2249	.4039	-.2132	-.1769	-.1651								
165.000	.0034		.2278		-.0602	-.1762	-.1881								
180.000	.0088	.0821	.2307	.4363											
320.000	.0000	.0709	.0795	-.3016	-.2724	-.2068	-.1956								

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## 1A81A - PRESSURE SOURCE DATA TABULATION

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ARC11-019 1A81 LVAP(SBHL SEALED) ORB. FUSELAGE

(RETB02)

BETA0 ( 1 ) = -.032 ALPHA0( 5 ) = 2.167

SECTION ( 1 ) ORBITER FUSELAGE				DEPENDENT VARIABLE CP											
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.1128	.5508		.0524	.0069	.6362		-.1557		-.1221	-.0875	-.0607	-.0114	.0396	.0840
20.000				.0535	-.0032	-.0389		-.1656		-.1308					
40.000				.0610	-.0079	-.1121		-.1793		-.1605	-.0990	-.0527	-.0139	.0425	.0930
55.000				.0859	-.0010	-.0829		-.1638		-.2066					
70.000				.0776	-.0213	-.0637		-.1706		-.2635	-.2694	-.1296	-.0528	-.0194	
90.000		.4241		.0921	-.0170	-.0351		-.1739		-.3129	-.2868	-.1479	-.0546	-.0194	
120.000				.1541	.0656	.0847		-.0493		-.4002	-.3411	-.2672	-.0755	-.0375	
140.000										-.4868					
150.000			.2872	.1700	.1222	.1405				-.6621	-.3640	-.1580	-.0657	-.0205	
151.000									-.0676						
156.000								.3491							
162.000									-.0481						
165.000										-1.2544	-.2872	-.1461	-.0632	-.0158	
169.000							.6093	.4332							
174.000															
180.000	1.1128	.1429	.2493	.1628	.1420	.1745		.3985		-1.5203	-.2647	-.1350	-.0639	-.0180	
305.000			.2595	.0994	.0444	-.0963		-.1623		-.1874					
320.000			.2061	.0664	.0393	-.1209		-.1779		-.1589	-.1129	-.0532	-.0071	.0451	.0865
340.000			.1808	.0450	.0382	-.0260		-.1630		-.1329					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.0858	.0612	.1577	-.1757	-.2248	-.2232	-.2055		-.1811	-.1673					
40.000	.0674	.0956	.0405	-.2475	-.2388	-.2120	-.1897		-.1698	-.1740					
70.000	.0645	.0594	-.0664	.0671	-.0523	-.0576	-.0873								
90.000	-.1712	-.1752	.0094	.0867	-.1140	-.1134	-.1272								
105.000			.0848	.0834	-.2129	-.1873	-.1617								
110.000								-.2256							
120.000	-.1249	.0094	.1639	.1199	-.2986	-.2206	-.2003	-.1794							
135.000			.2164	.2956	-.2624	-.1804	-.1895								
150.000	-.0597	.0632	.2168	.3858	-.2243	-.1768	-.1638								
165.000	-.0090		.2092		-.0779	-.1753	-.1815								
180.000	-.0018	.0755	.2099	.4147											
320.000	.0000	.0903	.0881	-.2872	-.2718	-.2041	-.1967								

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ARC11-019 1A81 LVAP(SBHL SEALED) ORB. FUSELAGE

(RETB02)

BETA0 ( 1 ) = -.026 ALPHA0( 6 ) = 4.242

SECTION ( 1 ) ORBITER FUSELAGE		DEPENDENT VARIABLE CP													
X/LB	.0000	.0080	.0230	.0480	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.1104	.5893		.0709	.0204	.6511		-.1355		-.1025	-.0844	-.0517	.0000	.0546	.0975
20.000				.0666	.0135	-.0265		-.1612		-.1196					
40.000				.0807	.0067	-.1056		-.1684		-.1482	-.0981	-.0426	-.0051	.0593	.1095
55.000				.0960	.0099	-.0817		-.1579		-.1975					
70.000				.0826	-.0137	-.0540		-.1673		-.2556	-.2749	-.1356	-.0693	-.0330	
90.000		.4042		.0916	-.0137	-.0323		-.1724		-.3050	-.2905	-.1581	-.0689	-.0341	
120.000				.1262	.0414	.0746		-.0482		-.4188	-.3563	-.2850	-.0913	-.0503	
140.000										-.5192					
150.000			.2498	.1334	.0842	.1178			-.0866	-.7033	-.3656	-.1693	-.0699	-.0325	
151.000															
156.000								.3361							
162.000									-.0739						
165.000										-1.3273	-.2970	-.1534	-.0684	-.0268	
169.000								.4120							
174.000							.5968								
180.000	1.1104	.1626	.2039	.1274	.1118	.1500		.3735		-1.6233	-.2760	-.1479	-.0666	-.0249	
305.000			.2732	.1129	.0530	-.0823		-.1539		-.1847					
320.000			.2333	.0832	.0566	-.1080		-.1580		-.1521	-.1027	-.0486	.0068	.0591	.1066
340.000			.2028	.0650	.0501	-.0080		-.1489		-.1271					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1033	.0844	.1550	-.1676	-.2224	-.2148	-.1979		-.1787	-.1680					
40.000	.0867	.1155	.0592	-.2357	-.2405	-.1934	-.1853		-.1666	-.1666					
70.000	.0892	.0862	-.0779	.0707	-.0520	-.0464	-.0877								
90.000	-.1982	-.1982	-.0028	.0889	-.1115	-.1030	-.1253								
105.000			.0781	.0889	-.2046	-.1702	-.1636								
110.000								-.2164							
120.000	-.1700	-.0064	.1583	.0934	-.2830	-.2228	-.1886	-.1687							
135.000			.2131	.2514	-.2699	-.1860	-.1864								
150.000	-.0871	.0545	.2149	.3343	-.2286	-.1831	-.1615								
165.000	-.0191		.1986		-.0856	-.1856	-.1720								
180.000	-.0104	.0665	.2022	.4070											
320.000	.0000	.1042	.1008	-.2667	-.2736	-.1986	-.1853								

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## IABIA - PRESSURE SOURCE DATA TABULATION

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ARC11-019 IAB1 LVAP(SBHL SEALED) ORB. FUSELAGE

(RET802)

BETA0 ( 1 ) = -.007 ALPHA0 ( 7 ) = 6.338

SECTION ( 1 ) ORBITER FUSELAGE				DEPENDENT VARIABLE CP											
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.0963	.6203		.0827	.0329	.6541		-.1212		-.0904	-.0694	-.0358	.0103	.0714	.1125
20.000				.0856	.0278	-.0216		-.1548		-.1046					
40.000				.0991	.0278	-.0918		-.1497		-.1308	-.0854	-.0274	.0088	.0751	.1285
55.000				.1053	.0180	-.0739		-.1489		-.1892					
70.000				.0838	-.0156	-.0500		-.1621		-.2552	-.2978	-.1406	-.0797	-.0487	
90.000		.3854		.0834	-.0189	-.0271		-.1665		-.3036	-.2945	-.1687	-.0845	-.0487	
120.000				.1031	.0138	.0597		-.0551		-.4301	-.3654	-.2999	-.1138	-.0829	
140.000										-.5358					
150.000			.2060	.0936	.0551	.0904				-.7344	-.4051	-.1800	-.0807	-.0449	
151.000									-.1042						
156.000								.3180							
162.000									-.1020						
165.000										-1.3888	-.3090	-.1618	-.0676	-.0332	
169.000								.3863							
174.000							.5765								
180.000	1.0963	.1854	.1536	.0902	.0708	.1195		.3418		-1.7029	-.2821	-.1534	-.0698	-.0343	
305.000			.2874	.1231	.0649	-.0661		-.1464		-.1820					
320.000			.2508	.1023	.0704	-.0916		-.1389		-.1364	-.0875	-.0345	.0212	.0746	.1227
340.000			.2289	.0800	.0605	-.0037		-.1349		-.1135					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1205	.1094	.1585	-.1708	-.2216	-.2052	-.1856			-.1634	-.1652				
40.000	.1078	.1240	.0753	-.2254	-.2515	-.1979	-.1798			-.1533	-.1598				
70.000	.1110	.1003	-.0955	.0701	-.0515	-.0426	-.0825								
90.000	-.2255	-.2183	-.0141	.0938	-.1077	-.1002	-.1290								
105.000			.0749	.1011	-.1949	-.1662	-.1606								
110.000								-.2140							
120.000	-.1961	-.0236	.1483	.0847	-.2789	-.2151	-.1828	-.1618							
135.000			.1834	.2224	-.2792	-.1889	-.1911								
150.000	-.1179	.0384	.1955	.2932	-.2511	-.1889	-.1643								
165.000	-.0364		.1860		-.0966	-.1893	-.1712								
180.000	-.0248	.0516	.1878	.4140											
320.000	.0000	.1260	.1211	-.2413	-.2708	-.1922	-.1788								

ARC11-019 1A81 LVAP(SBHL SEALED) ORB. FUSELAGE

(RETB03) ( 02 OCT 74 )

## REFERENCE DATA

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SREF = 2690.0000 SQ.FT.  XMRP = 976.0000 IN. XT
LREF = 1297.0000 INCHES  YMRP = .0000 IN. YT
BREF = 1297.0000 INCHES  ZMRP = 400.0000 IN. ZT
SCALE = .0300 SCALE

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## PARAMETRIC DATA

MACH	=	.900	RN/FT	=	3.500
ELV-1B	=	.000	ELV-0B	=	.000
RUDDER	=	.000	SPDBRK	=	55.000

BETAO ( 1 ) = .027 ALPHAO( 1 ) = -6.277

## SECTION (1) ORBITER FUSELAGE

## DEPENDENT VARIABLE CP

X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.2336	.5718		.1212	.1198	.7505		-.5015		-.2798	-.2437	-.1276	-.0225	.0516	.0786
20.000				.1166	.1021	.2448		-.6174		-.2856					
40.000				.1081	.0687	.0181		-.8297		-.3160	-.3757	-.0819	-.0152	.0596	.0890
55.000				.1409	.0668	-.0302		-.4117		-.5705					
70.000				.1584	.0598	.0011		-.2937		-.5093	-.8355	-.1375	.0496	.0925	
90.000		.5811		.1960	.0716	.0178		-.2293		-.5081	-.8843	-.2676	.0635	.0857	
120.000				.3118	.1940	.2037		.0435		-.4998	-.7721	-.3789	.0400	.0589	
140.000										-.5409					
150.000			.5290	.3920	.3132	.3382				-.8406	-.9000	-.1569	.0390	.0538	
151.000									.2160						
156.000								.5728							
162.000									.2962						
165.000										-.8684	-.8044	-.1151	.0397	.0563	
169.000								.6815							
174.000							.8235								
180.000	1.2336	.1767	.5112	.4041	.3564	.3863		.6652		-.9627	-.9180	-.1246	.0414	.0536	
305.000			.3304	.1626	.1081	-.0282		-.4884		-.3209					
320.000			.2366	.1157	.1106	.0376		-.8928		-.2620	-.3744	-.1090	-.0087	.0449	.0835
340.000			.2230	.1142	.1339	.2656		-.6652		-.2313					

X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450
PHI										
.000	.0825	.0394	.2087	-.0695	-.3325	-.3507	-.2907		-.2670	-.2572
40.000	.0478	.1197	.0701	-.2749	-.3308	-.3202	-.2968		-.2620	-.2786
70.000	.0456	.0732	.0291	.1078	-.1535	-.1065	-.1394			
90.000	.0233	-.0327	.0927	.1347	-.2200	-.1630	-.1721			
105.000			.1536	.1477	-.3644	-.2149	-.2084			
110.000								-.2968		
120.000	.0442	.0876	.2201	.2158	-.4691	-.3368	-.2987	-.2822		
135.000			.3190	.4422	-.3102	-.2064	-.2089			
150.000	.0667	.1471	.3434	.5178	-.1846	-.1779	-.1754			
165.000	.0843		.3456		.0113	-.1474	-.2288			
180.000	.0856	.1587	.3504	.5991						
320.000	.0914	.1024	.1564	-.1830	-.3590	-.3058	-.2492			

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ARC11-019 IAB1 LVAP(SBHL SEALED) ORB. FUSELAGE

(RET803)

BETA0 ( 1 ) = .004 ALPHA0 ( 2 ) = -4.157

SECTION ( 1 ) ORBITER FUSELAGE				DEPENDENT VARIABLE CP											
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.2301	.5967		.1157	.1065	.7500		-.4732		-.2550	-.2205	-.1241	-.0223	.0567	.0943
20.000				.1116	.0895	.2453		-.6015		-.2504					
40.000				.1080	.0621	.0176		-.8245		-.2908	-.3608	-.0847	-.0064	.0613	.1059
55.000				.1391	.0565	-.0285		-.4048		-.4171					
70.000				.1498	.0471	-.0120		-.2865		-.4996	-.8099	-.1208	.0397	.0734	
90.000		.5675		.1836	.0507	.0170		-.2171		-.4971	-.8862	-.2643	.0465	.0695	
120.000				.2868	.1660	.1836		.0511		-.4992	-.7838	-.4143	.0388	.0475	
140.000										-.5637					
150.000			.4787	.3467	.2668	.3012				-.8507	-.9488	-.2621	.0431	.0439	
151.000									.1959						
156.000								.5618							
162.000									.2709						
165.000										-.8990	-.8575	-.1946	.0414	.0449	
169.000								.6656							
174.000							.8014								
180.000	1.2301	.1870	.4553	.3487	.3117	.3436		.6451		-.9293	-.9728	-.1748	.0405	.0437	
305.000			.3214	.1484	.1040	-.0365		-.4785		-.2454					
320.000			.2447	.1077	.1085	.0277		-.8892		-.2462	-.3540	-.1173	-.0087	.0519	.0998
340.000			.2293	.1053	.1303	.2574		-.6174		-.2125					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1044	.0616	.2116	-.0703	-.3142	-.3278	-.2647			-.2566	-.2445				
40.000	.0767	.1293	.0868	-.2387	-.3200	-.3074	-.2729			-.2502	-.2561				
70.000	.0753	.0867	.0088	.0942	-.1649	-.1057	-.1255								
90.000	-.0192	-.0893	.0706	.1191	-.2285	-.1583	-.1567								
105.000			.1404	.1492	-.3698	-.2152	-.1933								
110.000								-.3020							
120.000	-.0037	.0561	.2126	.1988	-.4895	-.3291	-.2872	-.2699							
135.000			.2914	.4047	-.3380	-.2223	-.2101								
150.000	.0333	.1162	.3149	.4950	-.2205	-.1988	-.1761								
165.000	.0567		.3176		-.0298	-.1746	-.2157								
180.000	.0582	.1319	.3195	.5637											
320.000	.0633	.1230	.1572	-.1581	-.3426	-.2768	-.2378								



ARC11-019 IAB1 LVAP(SBHL SEALED) ORB. FUSELAGE

(RET803)

BETA0 ( 1 ) = -.020 ALPHA0( 3 ) = -2.045

SECTION ( 1 ) ORBITER FUSELAGE	DEPENDENT VARIABLE CP														
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.2343	.6270		.1107	.1012	.7542		-.4642		-.2326	-.2262	-.1307	-.0193	.0636	.1081
20.000				.1073	.0820	.2451		-.5676		-.2328					
40.000				.1063	.0557	.0124		-.8191		-.2780	-.3582	-.1258	-.0087	.0696	.1230
55.000				.1319	.0511	-.0346		-.3991		-.2617					
70.000				.1411	.0264	-.0169		-.2817		-.4870	-.7888	-.1778	.0270	.0594	
90.000		.5491		.1664	.0336	.0128		-.2069		-.4819	-.7601	-.2114	.0372	.0541	
120.000				.2542	.1413	.1682		.0604		-.4952	-.7915	-.3848	.0510	.0374	
140.000										-.5789					
150.000			.4348	.3003	.2282	.2710				-.8956	-.9819	-.3430	.0614	.0392	
151.000									.1897						
156.000								.5542							
162.000									.2575						
165.000										-.9243	-.9039	-.2356	.0510	.0399	
169.000								.6537							
174.000							.7857								
180.000	1.2343	.1951	.3980	.2988	.2648	.3105		.6274		-.8879	-1.0272	-.1996	.0471	.0363	
305.000			.3213	.1435	.0981	-.0423		-.4719		-.2320					
320.000			.2603	.1060	.1053	.0235		-.8467		-.2403	-.3493	-.1415	-.0055	.0616	.1153
340.000			.2407	.1002	.1213	.2558		-.5841		-.2122					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1165	.0885	.2133	-.0730	-.3215	-.3308	-.2616		-.2431	-.2348					
40.000	.0953	.1416	.1014	-.2091	-.3300	-.2961	-.2759		-.2448	-.2427					
70.000	.0990	.1025	-.0248	.0841	-.2087	-.1089	-.1253								
90.000	-.0577	-.1634	.0435	.1042	-.2814	-.1641	-.1566								
105.000			.1084	.1405	-.4111	-.2167	-.1924								
110.000								-.2836							
120.000	-.0480	.0235	.1845	.2651	-.4810	-.3013	-.2666	-.2603							
135.000			.2629	.4101	-.3557	-.2304	-.2103								
150.000	-.0060	.0898	.2872	.4704	-.2569	-.2265	-.1867								
165.000	.0269		.2889		-.0612	-.2038	-.2159								
180.000	.0331	.1011	.2949	.5322											
320.000	.0360	.1398	.1633	-.1362	-.3414	-.2742	-.2477								

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## IAB1A - PRESSURE SOURCE DATA TABULATION

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ARC11-019 IAB1 LVAP(SBHL SEALED) ORB. FUSELAGE

(RETB03)

BETA0 ( 1 ) = -.030 ALPHA0( 4 ) = .070

SECTION ( 1 ) ORBITER FUSELAGE

DEPENDENT VARIABLE CP

X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3760	.4970	.5740
PHI															
.000	1.2301	.6514		.1068	.0882	.7473		-.4375		-.2101	-.2040	-.1186	-.0128	.0741	.1179
20.000				.1029	.0737	.2403		-.4574		-.2021					
40.000				.1046	.0515	.0015		-.7835		-.2292	-.3284	-.1171	-.0012	.0804	.1351
55.000				.1247	.0411	-.0455		-.3895		-.2115					
70.000				.1266	.0196	-.0200		-.2758		-.2619	-.7792	-.2060	.0044	.0452	
90.000		.5245		.1486	.0199	.0090		-.2001		-.4389	-.7898	-.2257	.0165	.0454	
120.000				.2186	.1128	.1613		.0620		-.4911	-.7331	-.3965	.0502	.0287	
140.000										-.5879					
150.000			.3881	.2507	.1850	.2404			.1834	-.9274	-1.0143	-.3553	.0647	.0286	
151.000															
156.000								.5434							
162.000									.2469						
165.000										-.9446	-.9349	-.2267	.0483	.0300	
169.000								.6373							
174.000							.7694								
180.000	1.2301	.2006	.3466	.2549	.2183	.2754		.6083		-.9849	-1.0526	-.2121	.0471	.0286	
305.000			.3248	.1394	.0940	-.0446		-.4659		-.2535					
320.000			.2715	.1066	.1008	.0200		-.4641		-.2392	-.3023	-.1366	-.0027	.0699	.1264
340.000			.2481	.0976	.1112	.253		-.4936		-.2059					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1259	.1102	.2022	-.0790	-.3329	-.3064	-.2646		-.2338	-.2300					
40.000	.1182	.1481	.1057	-.1819	-.3339	-.2873	-.2636		-.2276	-.2302					
70.000	.1136	.1254	-.0640	.0724	-.2283	-.1092	-.1178								
90.000	-.0930	-.2544	.0134	.0988	-.3053	-.1517	-.1434								
105.000			.0840	.1277	-.4441	-.1860	-.1824								
110.000								-.2866							
120.000	-.0950	-.0232	.1531	.2532	-.5008	-.2697	-.2396	-.2415							
135.000			.2318	.4259	-.3773	-.2265	-.2093								
150.000	-.0453	.0549	.2555	.4530	-.2885	-.2328	-.1921								
165.000	-.0014		.2596		-.0930	-.2297	-.2120								
180.000	.0000	.0721	.2654	.4941											
320.000	.0075	.1526	.1647	-.1284	-.3434	-.2634	-.2427								

ARC11-019 IA81 LVAP(SBHL SEALED) ORB. FUSELAGE

(RET803)

BETA0 ( 1 ) = -.035 ALPHA0( 5 ) = 2.209

## SECTION ( 1 ) ORBITER FUSELAGE

## DEPENDENT VARIABLE CP

X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.2254	.6796		.1101	.0895	.7481		-.4549		-.1967	-.1693	-.1171	-.0071	.0836	.1346
20.000				.1075	.0738	.2390		-.4310		-.1996					
40.000				.1179	.0535	.0010		-.3540		-.2161	-.2881	-.1258	.0019	.0880	.1505
55.000				.1340	.0376	-.0518		-.3741		-.2490					
70.000				.1229	.0079	-.0258		-.2646		-.2746	-.7588	-.2087	-.0177	.0305	
90.000		.5091		.1393	.0101	.0094		-.1845		-.3412	-.7785	-.2741	-.0073	.0322	
120.000				.1920	.0818	.1472		.0722		-.4741	-.7397	-.4221	.0110	.0173	
140.000										-.5833					
150.000			.3405	.2058	.1459	.2104				-.9436	-1.0676	-.4502	.0438	.0257	
151.000									.1774						
156.000								.5362							
162.000									.2329						
165.000										-.9795	-.9665	-.3643	.0392	.0274	
169.000								.6230							
174.000							.7500								
180.000	1.2254	.2147	.2919	.2046	.1720	.2410		.5916		-1.0729	-1.0785	-.3102	.0339	.0271	
305.000			.3288	.1465	.0909	-.0475		-.3956		-.2355					
320.000			.2865	.1170	.1081	.0166		-.2608		-.2263	-.2695	-.1295	.0004	.0797	.1409
340.000			.2623	.1035	.1172	.2487		-.4147		-.2027					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1472	.1302	.1997	-.0850	-.3395	-.3021	-.2572		-.2344	-.2220					
40.000	.1329	.1569	.1174	-.1631	-.3678	-.2963	-.2635		-.2296	-.2215					
70.000	.1322	.1357	-.1075	.0531	-.2100	-.0913	-.0997								
90.000	-.1220	-.3288	-.0152	.0753	-.3033	-.1335	-.1307								
105.000			.0642	.1009	-.4490	-.1674	-.1692								
110.000								-.2657							
120.000	-.1316	-.0817	.1343	.1865	-.5236	-.2334	-.2178	-.2287							
135.000			.1984	.3747	-.4117	-.2155	-.1996								
150.000	-.0815	.0174	.2191	.4312	-.3002	-.2443	-.1914								
165.000	-.0324		.2220		-.1203	-.2422	-.2125								
180.000	-.0302	.0340	.2228	.4331											
320.000	-.0194	.1650	.1713	-.0998	-.3535	-.2693	-.2493								

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IAB1A - PRESSURE SOURCE DATA TABULATION

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ARC11-019 IAB1 LVAP(SBHL SEALED) ORB. FUSELAGE

(RETB03)

BETA0 (1) = -.028 ALPHA0(6) = 4.323

SECTION (1) ORBITER FUSELAGE				DEPENDENT VARIABLE CP											
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.2150	.7073		.1276	.0956	.7516		-.4416		-.1850	-.1548	-.0924	.0011	.0949	.1411
20.000				.1204	.0787	.2300		-.3492		-.1903					
40.000				.1286	.0598	-.0113		-.2285		-.2049	-.2478	-.1204	.0076	.0953	.1624
55.000				.1400	.0455	-.0621		-.2964		-.2170					
70.000				.1201	.0037	-.0331		-.2406		-.2720	-.7427	-.2316	-.0391	.0238	
90.000		.4889		.1305	-.0021	.0037		-.1669		-.3289	-.7767	-.2471	-.0306	.0223	
120.000				.1598	.0548	.1263		.0794		-.4544	-.7418	-.3950	-.0439	.0010	
140.000										-.5796					
150.000			.2970	.1620	.1075	.1805				-.9525	-.6935	-.4870	-.0077	.0237	
151.000									.1680						
156.000								.5259							
162.000									.2176						
165.000										-1.0093	-.7779	-.4679	.0262	.0303	
169.000								.6067							
174.000						.7303									
180.000	1.2150	.2312	.2434	.1609	.1387	.2124		.5726		-1.1471	-.9108	-.3930	.0192	.0274	
305.000			.3354	.1517	.0986	-.0502		-.2971		-.2204					
320.000			.3059	.1304	.1153	.0122		-.2071		-.2158	-.2389	-.1192	.0151	.0875	.1549
340.000			.2834	.1169	.1201	.2467		-.3769		-.1997					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1575	.1436	.1914	-.0904	-.3450	-.2961	-.2607		-.2065	-.2089					
40.000	.1469	.1668	.1312	-.1397	-.3648	-.2869	-.2481		-.2139	-.2093					
70.000	.1459	.1494	-.1340	.0523	-.1681	-.0667	-.0957								
90.000	-.1438	-.4172	-.0409	.0569	-.2558	-.1428	-.1289								
105.000			.0459	.0743	-.3895	-.1871	-.1674								
110.000								-.2603							
120.000	-.1610	-.1223	.1116	.1750	-.5079	-.2576	-.2078	-.2136							
135.000			.1634	.3524	-.4186	-.2188	-.1959								
150.000	-.1206	-.0117	.1871	.3921	-.3058	-.2341	-.1821								
165.000	-.0538		.1893		-.1203	-.2391	-.2119								
180.000	-.0434	.0123	.1929	.3889											
320.000	-.0422	.1737	.1847	-.0834	-.3397	-.2670	-.2334								

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ARC11-019 IAB1 LVAP(SBHL SEALED) ORB. FUSELAGE

(RET803)

BETA0 ( 1 ) = .066 ALPHA0( 7 ) = 6.247

SECTION ( 1 ) ORBITER FUSELAGE				DEPENDENT VARIABLE CP											
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.2032	.7318		.1395	.1089	.7559		-.4112		-.1642	-.1237	-.0815	.0086	.0999	.1496
20.000				.1407	.0939	.2220		-.2910		-.1748					
40.000				.1511	.0782	-.0132		-.1500		-.1886	-.2142	-.1035	.0154	.1045	.1671
55.000				.1519	.0537	-.0698		-.2337		-.1947					
70.000				.1224	.0073	-.0339		-.1911		-.2400	-.7162	-.2635	-.0549	.0136	
90.000		.4727		.1205	-.0041	-.0006		-.1424		-.3022	-.7681	-.1914	-.0541	.0146	
120.000				.1346	.0318	.1151		.0813		-.4420	-.7470	-.3039	-.0826	-.0157	
140.000										-.5801					
150.000			.2562	.1215	.0697	.1547				-.9681	-.6606	-.5088	-.0435	.0157	
151.000									.1641						
156.000								.5125							
162.000									.2071						
165.000										-1.0471	-.7140	-.4769	.0013	.0291	
169.000								.5886							
174.000							.7124								
180.000	1.2032	.2541	.1937	.1210	.0935	.1825		.5524		-.8849	-.7521	-.4776	-.0113	.0237	
305.000			.3515	.1672	.1093	-.0501		-.2449		-.2076					
320.000			.3340	.1575	.1304	.0183		-.1514		-.2020	-.2069	-.1025	.0283	.1021	.1608
340.000			.3073	.1381	.1306	.2484		-.3419		-.1880					
X/LB															
	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1620	.1543	.1860	-.0892	-.3383	-.3069	-.2778		-.2298	-.2331					
40.000	.1656	.1721	.1357	-.1230	-.3896	-.2885	-.2602		-.2317	-.2266					
70.000	.1600	.1589	-.1585	.0508	-.1570	-.1039	-.1035								
90.000	-.1523	-.4919	-.0581	.0542	-.2322	-.1552	-.1378								
105.000			.0392	.0442	-.3563	-.1978	-.1780								
110.000								-.2409							
120.000	-.1836	-.1551	.0832	.1077	-.4920	-.2661	-.2061	-.2036							
135.000			.1354	.2783	-.4363	-.2284	-.2046								
150.000	-.1477	-.0454	.1530	.3623	-.3221	-.2454	-.1960								
165.000	-.0741		.1627		-.1276	-.2378	-.2133								
180.000	-.0628	-.0187	.1627	.3716											
320.000	-.0577	.1863	.1902	-.0639	-.3233	-.2712	-.2303								

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ARC11-019 IAB1 LVAP(SBHL SEALED) ORB. FUSELAGE

(RET804) ( 02 OCT 74 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 976.0000 IN. XT  
 LREF = 1297.0000 INCHES YMRP = .0000 IN. YT  
 BREF = 1297.0000 INCHES ZMRP = 400.0000 IN. ZT  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

MACH = 1.100 RN/FT = 3.000  
 ELV-18 = .000 ELV-08 = .000  
 RUDDER = .000 SPDBRK = 55.000

BETA0 ( 1 ) = .066 ALPHA0 ( 1 ) = -4.854

## SECTION ( 1 ) ORBITER FUSELAGE

## DEPENDENT VARIABLE CP

X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.3240	.7526		.3314	.3330	.9197		-.4026		-.0579	-.1718	-.1386	-.1588	-.0462	.0757
20.000				.3274	.3130	.4783		-.3784		-.0432					
40.000				.3218	.2860	.2742		-.4340		-.3980	-.0995	-.1805	-.3072	-.0516	.1155
55.000				.3506	.2792	.2205		-.0914		-.2778					
70.000				.3630	.2696	.2341		.0057		-.1801	-.5832	-.3234	-.2471	-.1068	
90.000		.7442		.3941	.2774	.2533		.0686		-.1809	-.5277	-.5397	-.2126	-.1109	
120.000				.4908	.3798	.4049		.3075		-.1800	-.4322	-.6792	-.2567	-.1213	
140.000										-.2751					
150.000			.6710	.5458	.4744	.5072				-.4556	-.5419	-.3528	-.2854	-.1264	
151.000									.4472						
156.000								.7482							
162.000									.5132						
165.000										-.4731	-.4855	-.2696	-.2882	-.1251	
169.000								.8441							
174.000							.9771								
180.000	1.3240	.3873	.6517	.5592	.5102	.5501		.8305		-.4497	-.5728	-.2494	-.2854	-.1257	
305.000			.5235	.3640	.3200	.2218		-.1814		-.2891					
320.000			.4473	.3229	.3249	.2937		-.4943		-.0670	-.3396	-.1426	-.1761	-.0448	.0841
340.000			.4319	.3226	.3433	.5023		-.4708		-.0059					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1137	.1021	.3043	.0995	-.3513	-.3273	-.3125		-.2774	-.2859					
40.000	.1135	.1945	.1896	-.1555	-.3797	-.3258	-.2934		-.2667	-.2649					
70.000	.1135	.1586	.2195	.2744	.0261	-.0740	-.1130								
90.000	.0696	.0167	.2676	.2853	-.0418	-.1300	-.1331								
105.000			.3349	.2354	-.1254	-.1783	-.1836								
110.000								-.3434							
120.000	.0714	.1795	.3658	.1510	-.1925	-.2176	-.2632	-.3018							
135.000			.4570	.4734	-.0965	-.1105	-.1516								
150.000	.0760	.2473	.4798	.5167	.0203	-.0455	-.1326								
165.000	.0727		.4815		.2214	.0151	-.2871								
180.000	.0740	.2646	.4836	.6647											
320.000	.0772	.1924	.2785	-.0347	-.3144	-.3036	-.2962								

ARC11-019 IAB1 LVAP(SBHL SEALED) ORB. FUSELAGE

(RETB04)

BETA0 ( 1 ) = .066 ALPHA0( 2 ) = -3.849

SECTION ( 1 ) ORBITER FUSELAGE		DEPENDENT VARIABLE CP													
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.3173	.7548		.3133	.3159	.9087		-.4145		-.0594	-.1727	-.1335	-.1548	-.0419	.0791
20.000				.3067	.2946	.4715		-.3915		-.0383					
40.000				.3052	.2670	.2642		-.4367		-.2851	-.1079	-.1653	-.3011	-.0457	.1200
55.000				.3371	.2630	.2086		-.0941		-.2730					
70.000				.3473	.2503	.2218		.0038		-.1784	-.5841	-.3239	-.2598	-.1091	
90.000		.7275		.3771	.2597	.2430		.0673		-.1779	-.5348	-.5375	-.2199	-.1134	
120.000				.4668	.3565	.3890		.3063		-.1836	-.4370	-.6851	-.2478	-.1152	
140.000										-.2734					
150.000			.6446	.5164	.4464	.4868			.4388	-.4788	-.5631	-.3813	-.2980	-.1208	
151.000															
156.000								.7407							
162.000								.5039							
165.000										-.4844	-.5043	-.2933	-.3025	-.1208	
169.000								.8339							
174.000							.9647								
180.000	1.3173	.3762	.6217	.5311	.4797	.5280		.8177		-.4974	-.5880	-.2714	-.3005	-.1219	
305.000			.5141	.3463	.3019	.2103		-.1852		-.2879					
320.000			.4410	.3050	.3060	.2830		-.4997		-.0382	-.3396	-.1312	-.1707	-.0419	.0901
340.000			.4207	.3030	.3231	.4945		-.4698		-.0115					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1139	.1120	.3055	.0995	-.3516	-.3195	-.3089		-.2732	-.2832					
40.000	.1241	.2011	.1914	-.1393	-.3739	-.3167	-.2873		-.2625	-.2555					
70.000	.1205	.1694	.1827	.2515	.0110	-.0838	-.1222								
90.000	.0613	-.0704	.2398	.2518	-.0513	-.1335	-.1445								
105.000			.3093	.2274	-.1371	-.1852	-.1979								
110.000								-.3382							
120.000	.0646	.1353	.3483	.1163	-.1958	-.2314	-.2725	-.2905							
135.000			.4312	.4431	-.1112	-.1305	-.1691								
150.000	.0730	.2101	.4530	.4814	.0021	-.0678	-.1509								
165.000	.0811		.4553		.2099	-.0053	-.2806								
180.000	.0783	.2256	.4581	.6340											
320.000	.0829	.1952	.2799	-.0298	-.3124	-.3028	-.2925								

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## IABIA - PRESSURE SOURCE DATA TABULATION

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ARC11-019 IAB1 LVAP(SBHL SEALED) ORB. FUSELAGE

(RETB04)

BETA0 ( 1 ) = .067 ALPHA0( 3 ) = -1.842

SECTION ( 1 ) ORBITER FUSELAGE		DEPENDENT VARIABLE CP													
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.3191	.7628		.2709	.2692	.8925		-.4259		-.0630	-.1504	-.1257	-.1165	-.0264	.0971
20.000				.2661	.2504	.4618		-.4446		-.0531					
40.000				.2694	.2220	.2469		-.4380		-.1396	-.0985	-.1351	-.2642	-.0353	.1436
55.000				.3064	.2187	.1877		-.0977		-.2661					
70.000				.3138	.2068	.1967		-.0018		-.1775	-.5831	-.3026	-.2629	-.1180	
90.000		.7032		.3470	.2154	.2221		.0635		-.1780	-.5426	-.5059	-.2322	-.1221	
120.000				.4255	.3117	.3598		.3027		-.1868	-.4477	-.6909	-.2238	-.1157	
140.000										-.2756					
150.000			.5895	.4640	.3926	.4474			.4263	-.5050	-.5994	-.4311	-.3187	-.1079	
151.000									.7290						
156.000									.4870						
162.000										-.5108	-.5375	-.3334	-.3296	-.1016	
165.000															
169.000								.8172							
174.000							.9452								
180.000	1.3191	.3440	.5641	.4711	.4269	.4861		.7982		-.5915	-.6162	-.3116	-.3296	-.1021	
305.000			.4932	.3150	.2664	.1908		-.1879		-.2774					
320.000			.4235	.2679	.2659	.2630		-.5025		-.0450	-.3248	-.1081	-.1381	-.0287	.1073
340.000			.3954	.2590	.2799	.4841		-.5073		-.0150					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1195	.1480	.3207	.1120	-.3548	-.3230	-.3102		-.2679	-.2764					
40.000	.1523	.2278	.2179	-.0741	-.3903	-.3273	-.2899		-.2547	-.2462					
70.000	.1487	.1983	.1031	.2171	-.0099	-.0963	-.1347								
90.000	.0539	-.1344	.1716	.2016	-.0564	-.1465	-.1593								
105.000			.2577	.1993	-.1514	-.2044	-.2183								
110.000								-.3166							
120.000	.0529	.0790	.3278	.1249	-.1869	-.2419	-.2833	-.3021							
135.000			.3705	.3816	-.1166	-.1438	-.1868								
150.000	.0669	.1602	.3994	.4283	-.0208	-.0902	-.1707								
165.000	.0872		.4057		.1902	-.0292	-.2797								
180.000	.0887	.1765	.4090	.5710											
320.000	.0903	.2377	.3070	.0122	-.3065	-.3105	-.2851								



ARC11-019 1A81 LVAP(SBHL SEALED) ORB. FUSELAGE

(RETB04)

BETA0 (1) = .067 ALPHA0(4) = .164

SECTION (1) ORBITER FUSELAGE		DEPENDENT VARIABLE CP													
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.3311	.7606		.2210	.2202	.8709		-.4189		-.0459	-.0982	-.1058	-.0979	-.0112	.1132
20.000				.2230	.1936	.4444		-.5223		-.0366					
40.000				.2362	.1693	.2228		-.4412		-.1634	-.1040	-.1264	-.1697	-.0343	.1600
55.000				.2783	.1754	.1586		-.1040		-.2583					
70.000				.2861	.1602	.1668		-.0104		-.1761	-.5827	-.2865	-.2344	-.1296	
90.000		.6755		.3145	.1711	.1924		.0583		-.1751	-.5450	-.4188	-.2400	-.1271	
120.000				.3786	.2571	.3288		.2967		-.1933	-.4566	-.7044	-.2243	-.1248	
140.000										-.2802					
150.000			.5365	.4009	.3300	.4048				-.5275	-.6637	-.4774	-.3288	-.0947	
151.000									.4112						
156.000								.7136							
162.000									.4670						
165.000										-.5364	-.5710	-.3772	-.3567	-.0868	
169.000								.7981							
174.000						.9270									
180.000	1.3311	.2912	.5048	.4103	.3636	.4393		.7763		-.6609	-.6475	-.3536	-.3595	-.0856	
305.000			.4769	.2844	.2336	.1619		-.1959		-.2571					
320.000			.3885	.2251	.2234	.2333		-.5015		-.0466	-.2365	-.0789	-.0807	-.0150	.1262
340.000			.3507	.2134	.2305	.4605		-.4828		.0098					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1320	.1780	.3243	.1091	-.3769	-.3227	-.3002		-.2554	-.2532					
40.000	.1744	.2430	.2388	-.0213	-.4566	-.3392	-.2931		-.2514	-.2437					
70.000	.1739	.2265	-.0469	.1903	-.0179	-.1059	-.1504								
90.000	.0292	-.1724	.0860	.1789	-.0709	-.1660	-.1808								
105.000			.1825	.1599	-.1713	-.2263	-.2537								
110.000								-.3208							
120.000	.0246	.0360	.2741	.2096	-.1946	-.2568	-.2939	-.2936							
135.000			.3215	.4026	-.0889	-.1623	-.2116								
150.000	.0457	.1492	.3332	.4254	-.0186	-.1084	-.1885								
165.000	.0736		.3469		.1652	-.0401	-.2685								
180.000	.0820	.1540	.3550	.5126											
320.000	.0866	.2687	.3309	.0569	-.3138	-.3350	-.2832								

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## IAQ1A - PRESSURE SOURCE DATA TABULATION

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ARC11-019 IA81 LVAP(SBHL SEALED) ORB. FUSELAGE

(RETB04)

BETA0 ( 1 ) = .067 ALPHA0( 5 ) = 2.192

SECTION ( 1 ) ORBITER FUSELAGE		DEPENDENT VARIABLE CP													
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.3291	.7549		.1867	.1856	.8365		-.3321		-.0269	-.0708	-.0805	-.0711	.0131	.1343
20.000				.1864	.1654	.4254		-.5373		-.0183					
40.000				.2072	.1484	.1985		-.4479		-.1252	-.0944	-.1178	-.0767	-.0272	.1721
55.000				.2592	.1555	.1309		-.1148		-.2579					
70.000				.2650	.1319	.1434		-.0195		-.1754	-.5782	-.2688	-.2282	-.1376	
90.000		.6551		.2868	.1332	.1703		.0504		-.1726	-.5434	-.3455	-.2562	-.1302	
120.000				.3360	.1993	.3009		.2918		-.1979	-.4674	-.7127	-.2403	-.1267	
140.000										-.2872					
150.000			.4870	.3446	.2657	.3608				-.5509	-.6987	-.5205	-.2994	-.0899	
151.000									.4024						
156.000								.7069							
162.000									.4514						
165.000										-.5637	-.6029	-.4182	-.3709	-.0823	
169.000								.7847							
174.000							.9159								
180.000	1.3291	.2454	.4431	.3553	.2995	.3941		.7593		-.7175	-.6791	-.3920	-.3801	-.0805	
305.000			.4557	.2687	.2080	.1388		-.2062		-.2458					
320.000			.3557	.1935	.1698	.2015		-.5001		-.0209	-.1717	-.0556	-.0308	-.0056	.1427
340.000			.3028	.1765	.1949	.4294		-.4301		.0111					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1818	.2013	.3280	.1116	-.3099	-.3105	-.2939			-.2435	-.2470				
40.000	.1930	.2599	.2541	-.0025	-.4097	-.3272	-.2837			-.2315	-.2343				
70.000	.1940	.2439	-.2056	.1625	-.0452	-.1470	-.1951								
90.000	.0103	-.2079	.0073	.1582	-.1051	-.2074	-.2154								
105.000			.1460	.1532	-.1961	-.2671	-.3038								
110.000								-.3353							
120.000	-.0027	-.0120	.2402	.1537	-.2285	-.2949	-.3191	-.3158							
135.000			.3002	.3414	-.1701	-.2055	-.2450								
150.000	.0250	.1146	.3118	.3760	-.0473	-.1382	-.2199								
165.000	.0749		.3235		.1347	-.0798	-.2666								
180.000	.0836	.1298	.3253	.4651											
320.000	.0853	.2838	.3405	.0724	-.3298	-.2926	-.2630								

ARC11-019 IAB1 LVAP(SBHL SEALED) ORB. FUSELAGE

(RETB04)

BETA0 ( 1 ) = .066 ALPHA0( 6 ) = 4.200

## SECTION ( 1 ) ORBITER FUSELAGE

## DEPENDENT VARIABLE CP

X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.3200	.7444		.1696	.1721	.7871		-.3057		-.0085	-.0669	-.0694	-.0514	.0362	.1486
20.000				.1744	.1480	.3971		-.4355		-.0283					
40.000				.1995	.1485	.1654		-.4513		-.0822	-.0852	-.1150	-.0639	.0007	.1802
55.000				.2564	.1632	.1064		-.1316		-.2607					
70.000				.2551	.1300	.1200		-.0329		-.1734	-.5279	-.2715	-.2326	-.1449	
90.000		.6350		.2681	.1173	.1513		.0391		-.1660	-.5485	-.3188	-.2875	-.1413	
120.000				.3036	.1654	.2717		.2868		-.2061	-.4932	-.7211	-.2884	-.1401	
140.000										-.3004					
150.000			.4423	.2991	.2160	.3201				-.5729	-.7361	-.5638	-.2872	-.0948	
151.000									.3922						
156.000								.6968							
162.000									.4376						
165.000										-.5959	-.6424	-.4636	-.3573	-.0843	
169.000								.7704							
174.000							.8993								
180.000	1.3200	.2059	.3984	.3059	.2434	.3534		.7410		-.7608	-.7142	-.4348	-.3824	-.0815	
305.000			.4493	.2631	.2144	.1175		-.2094		-.2053					
320.000			.3344	.1865	.1908	.1771		-.4832		.0175	-.1496	-.0448	-.0179	.0057	.1568
340.000			.2734	.1581	.1865	.4092		-.3892		-.0031					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1639	.2223	.3370	.1205	-.2770	-.2929	-.2820		-.2331	-.2276					
40.000	.2110	.2734	.2742	-.0004	-.4094	-.3033	-.2645		-.2196	-.2231					
70.000	.2135	.2596	-.2653	.1297	-.0630	-.1716	-.2207								
90.000	-.0050	-.2595	-.0158	.1167	-.1265	-.2277	-.2406								
105.000			.1432	.1145	-.2084	-.2931	-.3382								
110.000								-.2890							
120.000	-.0281	-.0517	.2365	.1139	-.2393	-.3189	-.3487	-.3200							
135.000			.2781	.3520	-.1921	-.2350	-.2740								
150.000	-.0096	.0875	.3042	.3495	-.1003	-.1772	-.2479								
165.000	.0569		.3091		.1109	-.1124	-.2751								
180.000	.0691	.0986	.3027	.4689											
320.000	.0755	.2966	.3474	.0785	-.3068	-.2752	-.2466								

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## IABIA - PRESSURE SOURCE DATA TABULATION

PAGE 29

ARC11-019 IAB1 LVAP(SBHL SEALED) ORB. FUSELAGE

(RETB04)

BETA0 ( 1 ) = .066 ALPHA0 ( 7 ) = 5.218

## SECTION ( 1 ) ORBITER FUSELAGE

## DEPENDENT VARIABLE CP

X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.3184	.7424		.1595	.1722	.7381		-.2887		.0056	-.0656	-.0606	-.0359	.0443	.1587
20.000				.1714	.1537	.3892		-.3663		-.0246					
40.000				.1945	.1602	.1583		-.4362		-.0561	-.0834	-.1086	-.0504	.0179	.1861
55.000				.2607	.1747	.1024		-.1221		-.2494					
70.000				.2549	.1331	.1145		-.0299		-.1664	-.4154	-.2751	-.2285	-.1484	
90.000		.6273		.2658	.1126	.1475		.0443		-.1581	-.5433	-.3137	-.2923	-.1459	
120.000				.2894	.1514	.2630		.2929		-.1979	-.4963	-.7111	-.3198	-.1451	
140.000										-.2910					
150.000			.4253	.2724	.1901	.3047				-.5715	-.7464	-.5747	-.2881	-.0894	
151.000									.3917						
156.000								.6983							
162.000									.4338						
165.000										-.6030	-.6542	-.4733	-.3351	-.0764	
169.000							.8924	.7662							
174.000															
180.000	1.3184	.1782	.3708	.2831	.2185	.3359		.7368		-.7694	-.7220	-.4443	-.3602	-.0741	
305.000			.4454	.2722	.2272	.1183		-.1952		-.1104					
320.000			.3223	.1815	.1911	.1713		-.4557		.0560	-.1521	-.0339	-.0091	.0183	.1643
340.000			.2508	.1521	.1852	.3999		-.3522		.0036					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1648	.2238	.3458	.1244	-.3143	-.2832	-.2724		-.2358	-.2331					
40.000	.2130	.2796	.2816	-.0029	-.4081	-.2888	-.2557		-.2233	-.2128					
70.000	.2132	.2629	-.3371	.1097	-.0769	-.1868	-.2259								
90.000	-.0128	-.2322	-.0703	.0839	-.1401	-.2345	-.2526								
105.000			.1171	.0884	-.2163	-.3060	-.3505								
110.000								-.2812							
120.000	-.0392	-.0802	.2140	.0968	-.2426	-.3325	-.3622	-.3135							
135.000			.2520	.3620	-.2023	-.2526	-.2875								
150.000	-.0207	.0361	.2850	.3589	-.1109	-.1941	-.2626								
165.000	.0554		.2941		.1032	-.1265	-.2802								
180.000	.0676	.0729	.2944	.4844											
320.000	.0739	.2958	.3448	.0597	-.3114	-.2541	-.2454								



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## IABIA - PRESSURE SOURCE DATA TABULATION

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ARC11-019 IAB1 LVAP(SBHL SEALED) ORB. FUSELAGE

(RETB05)

BETA0 ( 1 ) = .070 ALPHA0( 2 ) = -3.880

SECTION ( 1 ) ORBITER FUSELAGE		DEPENDENT VARIABLE CP													
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.3747	.8608		.3249	.3504	.9833		-.2582		-.1884	-.0274	-.0274	-.0692	-.1133	-.0066
20.000				.3252	.3301	.5934		-.2780		-.2046					
40.000				.3366	.2901	.3619		-.2900		-.3353	-.1139	-.0544	-.1628	-.2853	-.0692
55.000				.3817	.2879	.2649		.0094		-.1365					
70.000				.3950	.2761	.2603		.1079		-.0459	-.4142	-.2742	-.1818	-.0968	
90.000		.7758		.4245	.2850	.2843		.1715		-.0481	-.3764	-.3898	-.1780	-.1083	
120.000				.4987	.3744	.4213		.4035		-.0547	-.2994	-.5198	-.2716	-.1228	
140.000										-.1781					
150.000			.6558	.5336	.4493	.5107				-.3212	-.4397	-.2956	-.2152	-.1356	
151.000									.5331						
156.000								.8184							
162.000									.5954						
165.000										-.3168	-.3923	-.2183	-.2167	-.1403	
169.000								.9061							
174.000						1.0208									
180.000	1.3747	.4005	.6267	.5421	.4817	.5481		.8921		-.4290	-.4301	-.1910	-.2123	-.1445	
305.000			.5591	.3847	.3344	.2683		-.0701		-.1447					
320.000			.4994	.3253	.3341	.3730		-.3521		-.1794	-.1273	-.0423	-.1844	-.0847	-.0056
340.000			.4616	.3148	.3552	.6010		-.3629		-.0595					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1030	.0694	.3275	.1747	-.3192	-.2811	-.2663		-.2350	-.2356					
40.000	.0890	.1866	.2130	-.1049	-.3223	-.2926	-.2663		-.2234	-.2078					
70.000	.0881	.1688	.0298	.1681	.0380	-.0375	-.0596								
90.000	-.0149	-.0514	.1430	.1583	-.0277	-.0731	-.0723								
105.000			.2302	.1050	-.0899	-.1338	-.1434								
110.000								-.2556							
120.000	-.0279	.0029	.2660	.0561	-.0944	-.1901	-.2222	-.2394							
135.000			.3545	.3508	-.0239	-.0681	-.1056								
150.000	-.0457	-.0231	.3723	.3816	.0895	.0113	-.0742								
165.000	-.0686		.3739		.3319	.0922	-.2422								
180.000	-.0698	-.0311	.3786	.4975											
320.000	-.0695	.2146	.3187	.0222	-.2529	-.2577	-.2718								

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OF POOR QUALITY

ARC11-019 IAB1 LVAP(SBHL SEALED) ORB. FUSELAGE

(RET805)

BETA0 ( 1 ) = .070 ALPHA0( 3 ) = -1.873

SECTION ( 1 ) ORBITER FUSELAGE				DEPENDENT VARIABLE CP											
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.4083	.8772		.2705	.3100	.9789		-.2754		-.2441	-.0610	-.0321	-.0060	-.1067	.0192
20.000				.2717	.2900	.5855		-.3066		-.3583					
40.000				.2907	.2498	.3399		-.3085		-.3825	-.1504	-.0260	-.1533	-.2185	.0043
55.000				.3547	.2637	.2264		-.0145		-.1678					
70.000				.3687	.2491	.2161		.0856		-.0689	-.4112	-.2877	-.1867	-.1099	
90.000		.7524		.4006	.2545	.2430		.1543		-.0590	-.3838	-.3940	-.1962	-.1140	
120.000				.4580	.3188	.3742		.3936		-.0632	-.3224	-.5282	-.2767	-.1359	
140.000										-.1841					
150.000			.5974	.4767	.3832	.4535				-.3397	-.4774	-.3365	-.2411	-.1443	
151.000									.5179						
156.000								.8033							
162.000									.5742						
165.000										-.3378	-.4287	-.2651	-.2474	-.1487	
169.000								.8859							
174.000							.9988								
180.000	1.4083	.3699	.5663	.4840	.4121	.4894		.8688		-.4736	-.4596	-.2330	-.2497	-.1541	
305.000			.5450	.3559	.3101	.2289		-.0930		-.1895					
320.000			.4814	.2821	.2970	.3476		-.3647		-.2974	-.0935	-.0365	-.1540	-.0687	.0211
340.000			.4412	.2637	.3101	.5901		-.4028		-.2675					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1288	.1171	.3371	.1766	-.2700	-.2797	-.2643		-.2206	-.2143					
40.000	.1123	.2124	.2298	-.0518	-.3008	-.3092	-.3002		-.2109	-.2140					
70.000	.1132	.1981	-.0855	.1356	-.0031	-.0749	-.0907								
90.000	-.0147	-.0808	.0745	.1023	-.0422	-.0965	-.1161								
105.000			.1920	.1137	-.1155	-.1530	-.1778								
110.000								-.2771							
120.000	-.0281	-.0042	.2476	.0321	-.0822	-.1994	-.2393	-.2574							
135.000			.2919	.2882	-.0330	-.0901	-.1279								
150.000	-.0433	-.0020	.3240	.3279	.0595	-.0147	-.1006								
165.000	-.0684		.3329		.2986	.0651	-.2329								
180.000	-.0738	-.0061	.3367	.4494											
320.000	-.0722	.2412	.3345	.0619	-.3204	-.2589	-.2743								

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## IA81A - PRESSURE SOURCE DATA TABULATION

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ARC11-019 IA81 LVAP(SBHL SEALED) ORB. FUSELAGE

(RETB05)

BETA0 ( 1 ) = .070 ALPHA0( 4 ) = .113

SECTION ( 1 ) ORBITER FUSELAGE	DEPENDENT VARIABLE CP														
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.4077	.8872		.2046	.2669	.9446		-.2894		-.3168	-.0804	-.0302	-.0211	-.0722	.0512
20.000				.1992	.2428	.5653		-.3446		-.4668					
40.000				.2344	.2089	.3135		-.3242		-.4083	-.2151	.0050	-.1464	-.1309	.0515
55.000				.3184	.2399	.1790		-.0367		-.1655					
70.000				.3418	.2269	.1577		.0649		-.0590	-.4240	-.3261	-.1863	-.1160	
90.000		.7430		.3738	.2244	.1801		.1440		-.0564	-.3922	-.4064	-.2114	-.1137	
120.000				.4220	.2738	.3205		.3896		-.0715	-.3312	-.5378	-.3175	-.1448	
140.000										-.1859					
150.000			.5535	.4258	.3251	.3949			.5059	-.3599	-.5069	-.3677	-.2654	-.1544	
151.000															
156.000							.7959								
162.000									.5574						
165.000										-.3602	-.4577	-.3043	-.2762	-.1604	
169.000								.8715							
174.000							.9940								
180.000	1.4077	.3462	.5098	.4305	.3504	.4282		.8487		-.5082	-.4875	-.2666	-.2743	-.1677	
305.000			.5295	.3284	.2835	.2007		-.1146		-.1894					
320.000			.4714	.2441	.2713	.3334		-.3788		-.3532	-.1087	-.0373	-.1128	-.0305	.0512
340.000			.4233	.2123	.2741	.5795		-.4640		-.3583					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1576	.1514	.3566	.1928	-.2495	-.2716	-.2531		-.2193	-.2093					
40.000	.1430	.2433	.2631	.0021	-.3130	-.3109	-.3055		-.2034	-.2087					
70.000	.1439	.2251	-.1883	.0970	-.0201	-.1020	-.1098								
90.000	-.0133	-.1303	-.0059	.0712	-.0613	-.1252	-.1428								
105.000			.1311	.0893	-.1343	-.1820	-.2035								
110.000								-.2697							
120.000	-.0346	-.0053	.2234	.1513	-.0995	-.2203	-.2478	-.2656							
135.000			.2290	.2899	.0114	-.1060	-.1531								
150.000	-.0410	.0540	.2484	.3071	.0530	-.0295	-.1216								
165.000	-.0585		.2779		.2578	.0449	-.2287								
180.000	-.0639	.0458	.2928	.4074											
320.000	-.0632	.2799	.3687	.1075	-.3246	-.2613	-.2761								



ARC11-019 1A81 LVAP(SBHL SEALED) ORB. FUSELAGE

(RETB05)

BETA0 (1) = .070 ALPHA0(5) = 2.177

SECTION (1) ORBITER FUSELAGE		DEPENDENT VARIABLE CP													
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.4017	.8900		.1367	.2205	.8297		-.3274		-.2811	-.1121	-.0125	-.0294	-.0485	.0843
20.000				.1307	.1974	.5280		-.4373		-.3546					
40.000				.1875	.1767	.2783		-.3285		-.4595	-.2620	-.0186	-.1520	-.0097	.1119
55.000				.2948	.2253	.1348		-.0373		-.1667					
70.000				.3183	.2107	.1081		.0619		-.0618	-.4300	-.3502	-.1914	-.1244	
90.000		.7127		.3453	.2034	.1203		.1417		-.0468	-.3998	-.4260	-.2365	-.1218	
120.000				.3827	.2314	.2458		.3884		-.0746	-.3556	-.5502	-.3432	-.1482	
140.000										-.1939					
150.000			.5111	.3777	.2734	.3190				-.3890	-.5401	-.4000	-.2949	-.1619	
151.000									.4978						
156.000								.7935							
162.000									.5461						
165.000										-.3960	-.4946	-.3403	-.3025	-.1689	
169.000								.8666							
174.000							.9828								
180.000	1.4017	.3050	.4622	.3859	.2994	.3463		.8371		-.5538	-.5210	-.3012	-.3032	-.1705	
305.000			.5201	.2958	.2689	.1646		-.1209		-.1723					
320.000			.4466	.1761	.2385	.3033		-.3813		-.3610	-.1239	-.0174	-.0482	.0146	.0944
340.000			.3897	.1456	.2356	.5514		-.5457		-.3091					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1845	.1829	.3802	.2116	-.2391	-.2598	-.2476		-.2068	-.1977					
40.000	.1670	.2691	.2976	.0337	-.3192	-.2919	-.2883		-.1955	-.1980					
70.000	.1673	.2517	-.2403	.0445	-.0429	-.1277	-.1360								
90.000	-.0124	-.1610	-.1054	.0591	-.0810	-.1505	-.1815								
105.000			.0639	.1074	-.1763	-.2172	-.2413								
110.000								-.2699							
120.000	-.0366	-.0168	.1750	.1369	-.1413	-.2619	-.2569	-.2616							
135.000			.2093	.2744	-.0740	-.1439	-.1885								
150.000	-.0363	.1153	.2147	.2795	.0610	-.0533	-.1484								
165.000	-.0414		.2376		.2042	.0177	-.2225								
180.000	-.0497	.1074	.2513	.3595											
320.000	-.0497	.3065	.3964	.1194	-.3198	-.2597	-.2693								

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## IAB1A - PRESSURE SOURCE DATA TABULATION

PAGE 35

ARC11-019 IAB1 LVAP(SBHL SEALED) ORB. FUSELAGE

(RETB05)

BETA0 ( 1 ) = .070 ALPHA0( 6 ) = 4.185

SECTION ( 1 ) ORBITER FUSELAGE

DEPENDENT VARIABLE CP

X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3730	.4970	.5740
PHI															
.000	1.3928	.8718		.1117	.2181	.7434		-.2976		-.1813	-.1559	.0357	.0256	.0082	.1196
20.000				.1012	.1730	.4978		-.5030		-.2985					
40.000				.1679	.1670	.2398		-.3178		-.4418	-.2740	-.0490	-.0562	.0009	.1362
55.000				.2878	.2266	.1244		-.0610		-.1677					
70.000				.3068	.2022	.0802		.0386		-.0604	-.4361	-.3753	-.1708	-.1384	
90.000		.6843		.3290	.1857	.0885		.1471		-.0432	-.4020	-.4376	-.2330	-.1346	
120.000				.3509	.2026	.1764		.3911		-.0694	-.3689	-.5551	-.3641	-.1686	
140.000										-.1753					
150.000			.4659	.3363	.2359	.2338			.4947	-.3949	-.5669	-.4291	-.3210	-.1620	
151.000															
156.000								.7870							
162.000									.5387						
165.000										-.4232	-.5303	-.3685	-.3248	-.1547	
169.000								.8586							
174.000							.9676								
180.000	1.3928	.2309	.4147	.3390	.2603	.2466		.8306		-.5792	-.5475	-.3282	-.3251	-.1515	
305.000			.5022	.2761	.2664	.1517		-.1422		-.1776					
320.000			.4102	.1273	.2292	.2720		-.3580		-.3904	-.1369	-.0324	.0317	.0271	.1231
340.000			.3341	.1041	.2257	.5131		-.5700		-.1881					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1813	.2068	.4289	.2468	-.2018	-.2387	-.2224		-.1835	-.1788					
40.000	.1956	.3057	.3369	.0229	-.2974	-.2524	-.2536		-.1835	-.1916					
70.000	.1934	.2812	-.2739	-.0155	-.0725	-.1465	-.1502								
90.000	-.0158	-.1878	-.1603	.0204	-.1033	-.1694	-.2075								
105.000			.0572	.0804	-.2164	-.2314	-.2635								
110.000								-.2772							
120.000	-.0412	-.0574	.2032	.0762	-.1529	-.2908	-.2667	-.2798							
135.000			.2290	.2573	-.1198	-.1792	-.2123								
150.000	-.0447	.0823	.2138	.2675	-.0165	-.0854	-.1710								
165.000	-.0345		.2271		.1872	-.0148	-.2282								
180.000	-.0352	.0915	.2398	.3622											
320.000	-.0342	.3343	.4208	.1315	-.2842	-.2212	-.2257								

ARC11-019 IA81 LVAP(SBHL SEALED) ORB. FUSELAGE

(RETB05)

BETA0 ( 1 ) = .069 ALPHA0 ( 7 ) = 6.212

SECTION ( 1 ) ORBITER FUSELAGE		DEPENDENT VARIABLE CP													
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.3837	.8842		.0865	.2140	.7166		-.2974		-.0575	-.1530	.0485	.0612	.0412	.1518
20.000				.0849	.1553	.4698		-.4793		-.2349					
40.000				.1493	.1563	.2109		-.3025		-.4043	-.0151	-.0281	.0183	.0307	.1613
55.000				.2860	.2340	.1243		-.0692		-.1652					
70.000				.3019	.2010	.0874		.0051		-.0603	-.4231	-.3411	-.1501	-.1622	
90.000		.6667		.3143	.1769	.0787		.1081		-.0314	-.3948	-.4254	-.2094	-.1530	
120.000				.3235	.1772	.1371		.3929		-.0558	-.3662	-.5546	-.3160	-.2002	
140.000										-.1533					
150.000			.4285	.2962	.2061	.1746				-.3894	-.5842	-.4537	-.3357	-.1439	
151.000									.4943						
156.000								.7820							
162.000									.5363						
165.000										-.4345	-.5498	-.3959	-.3385	-.1261	
169.000								.8529							
174.000							.9431								
180.000	1.3837	.2185	.3722	.3035	.2263	.1849		.8230		-.5867	-.5610	-.3515	-.3423	-.1163	
305.000			.5039	.2714	.2680	.1602		-.1395		-.1898					
320.000			.4079	.1125	.2208	.2667		-.3369		-.3687	-.1129	.0291	.0548	.0543	.1496
340.000			.3136	.0713	.2189	.5051		-.5854		-.0815					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.2375	.2242	.4497	.2574	-.2516	-.2452	-.2276		-.1850	-.1806					
40.000	.2150	.3195	.3520	.0083	-.3142	-.2395	-.2305		-.1759	-.1812					
70.000	.2124	.2954	-.3014	-.0707	-.1033	-.1646	-.1659								
90.000	-.0156	-.2122	-.2075	-.0107	-.1455	-.1846	-.2315								
105.000			.0426	.0569	-.2494	-.2341	-.2804								
110.000								-.2913							
120.000	-.0483	-.0904	.1927	.0457	-.1452	-.3002	-.3161	-.2824							
135.000			.2041	.2677	-.1287	-.1996	-.2311								
150.000	-.0598	.0242	.2158	.3017	-.0578	-.1134	-.1898								
165.000	-.0204		.2263		.1702	-.0390	-.2461								
180.000	-.0188	.0540	.2362	.3973											
320.000	-.0172	.3422	.4066	.0921	-.2598	-.2251	-.2194								

DATE 20 OCT 75

## 1A81A - PRESSURE SOURCE DATA TABULATION

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ARC11-019 1A81 LVAP(SBHL SEALED) ORB. FUSELAGE

(RETB05)

BETA0 ( 1 ) = .069 ALPHA0( 8 ) = 7.214

SECTION ( 1 ) ORBITER FUSELAGE				DEPENDENT VARIABLE CP											
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.3756	.8828		.0704	.2213	.7088		-.3021		-.0203	-.1475	.0503	.0674	.0541	.1662
20.000				.0701	.1603	.4545		-.4794		-.2143					
40.000				.1330	.1543	.2023		-.3036		-.4041	.0309	-.0173	.0408	.0091	.1697
55.000				.2791	.2397	.1242		-.0725		-.1810					
70.000				.3000	.2046	.0875		-.0130		-.0710	-.4233	-.3108	-.1496	-.1734	
90.000		.6585		.3101	.1748	.0795		.0723		-.0275	-.3982	-.4274	-.1971	-.1626	
120.000				.3073	.1642	.1237		.3911		-.0567	-.3728	-.5566	-.3242	-.2200	
140.000										-.1479					
150.000			.4105	.2785	.1888	.1512				-.3885	-.5958	-.4717	-.3455	-.1382	
151.000									.4936						
156.000								.7786							
162.000									.5338						
165.000										-.4419	-.5608	-.4119	-.3502	-.1128	
169.000								.0489							
174.000						.9307									
180.000	1.3756	.1912	.3524	.2824	.2083	.1617		.8173		-.5921	-.5713	-.3666	-.3531	-.1093	
305.000			.5132	.2688	.2726	.1576		-.1394		-.2114					
320.000			.4113	.1021	.2198	.2526		-.3353		-.3600	-.1203	.0392	.0725	.0657	.1611
340.000			.2991	.0540	.2237	.4992		-.5864		-.0783					
X/LB															
	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.2467	.2021	.4509	.2610	-.2323	-.2466	-.2180		-.1816	-.1823					
40.000	.2245	.3204	.3581	.0223	-.3214	-.2400	-.2215		-.1751	-.1785					
70.000	.2267	.3007	-.3125	-.0863	-.1159	-.1715	-.1698								
90.000	-.0148	-.2048	-.2371	-.0144	-.1768	-.1911	-.2348								
105.000			.0211	.0597	-.2634	-.2346	-.2820								
110.000								-.2745							
120.000	-.0510	-.1025	.1728	.0610	-.1420	-.2966	-.3350	-.2767							
135.000			.1763	.2490	-.1236	-.2009	-.2326								
150.000	-.0678	.0071	.2017	.3019	-.0706	-.1195	-.1905								
165.000	-.0212		.2194		.1650	-.0463	-.2453								
180.000	-.0094	.0334	.2321	.4129											
320.000	-.0101	.3470	.4032	.0793	-.2523	-.2227	-.2104								

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ARC11-019 IA81 LVAP(ELHL UNSEALD) ORB. FUSELAGE

(RETB06) ( 02 OCT 74 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 976.0000 IN. XT  
 LREF = 1297.0000 INCHES YMRP = .0000 IN. YT  
 BREF = 1297.0000 INCHES ZMRP = 400.0000 IN. ZT  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

MACH = .600 RN/FT = 2.250  
 ELV-1B = 8.000 ELV-0B = 4.000  
 RUDDER = .000 SPDBRK = .000

ALPHA0 ( 1 ) = -6.048 BETAO ( 1 ) = -.007

## SECTION ( 1 ) ORBITER FUSELAGE

## DEPENDENT VARIABLE CP

X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.1011	.4098	.0540	.0117	-.0168	.6391		-.1884		-.1530	-.1187	-.0836	-.0384	-.0021	.0194
20.000			.0662	.0070	-.0305	-.0533		-.2091		-.1604					
40.000			.1565	.0038	-.0506	-.1501		-.2370		-.2122	-.1287	-.0757	-.0420	.0000	.0173
55.000			.2271	.0470	-.0305	-.1201		-.2107		-.2365					
70.000			.2743	.0676	-.0205	-.0814		-.2017		-.2831	-.2471	-.0937	-.0105	.0390	
90.000		.4660	.3247	.1050	-.0078	-.0640		-.2202		-.3195	-.2834	-.1220	-.0221	.0311	
120.000			.4022	.2314	.1240	.1132		-.0703		-.3780	-.3093	-.2597	-.0506	.0048	
140.000										-.3854					
150.000			.4394	.3226	.2508	.2439				-.5116	-.2676	-.1172	-.0358	.0068	
151.000									.0062						
156.000								.3925							
162.000									.0660						
165.000										-.9796	-.2096	-.1057	-.0337	.0110	
169.000								.5096							
174.000							.6890								
180.000	1.1011	.6482	.4330	.3417	.2924	.3035		.4980		-.11324	-.1954	-.1004	-.0364	.0078	
305.000			.2090	.0608	.0051	-.1368		-.2133		-.2155					
320.000			.1145	.0064	-.0107	-.1626		-.2254		-.1955	-.1469	-.0831	-.0335	-.0043	.0131
340.000			.0939	.0022	.0009	-.0482		-.2053		-.1671					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.0215	.0630	.1415	-.1607	-.1912	-.2053	-.1794		-.1604	-.1439					
40.000	-.0200	-.0032	.0021	-.2645	-.1959	-.1863	-.1726		-.1578	-.1677					
70.000	-.0594	-.0974	-.0557	.0195	-.1575	-.1652	-.1538								
90.000	-.0280	-.0495	.0095	.0343	-.2164	-.1890	-.1590								
105.000			.0510	.0401	-.3437	-.2601	-.2062								
110.000								-.2140							
120.000	.0015	.0205	.1178	.1619	-.3967	-.3309	-.2981	-.2130							
135.000			.2198	.3913	-.2923	-.2193	-.2282								
150.000	.0325	.0884	.2429	.4634	-.2111	-.2114	-.2172								
165.000	.0341		.2445		-.0524	-.1973	-.1856								
180.000	.0404	.1031	.2461	.4818											
320.000	-.0248	.0379	.0690	-.2953	-.2211	-.1737	-.1636								

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## 1A81A - PRESSURE SOURCE DATA TABULATION

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ARC11-019 1A81 LVAP(ELHL UNSEALED) ORB. FUSELAGE

(RETB06)

ALPHA( 2) = -4.013 BETA0 ( 1) = -4.061

SECTION ( 1) ORBITER FUSELAGE		DEPENDENT VARIABLE CP													
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.0880	.4338	.0518	.0050	-.0288	.6095		-.2110		-.1706	-.1365	-.0995	-.0552	-.0001	.0444
20.000			.1005	.0260	-.0166	-.0119		-.2313		-.1711					
40.000			.2695	.0687	.0008	-.0976		-.2281		-.1922	-.1255	-.0711	-.0384	.0263	.0565
55.000			.3855	.1808	.0815	-.0272		-.1281		-.1695					
70.000			.4337	.2134	.1052	.0254		-.1049		-.2038	-.2037	-.0695	-.0011	.0373	
90.000		.6541	.4781	.2492	.1274	.0638		-.0970		-.2202	-.2353	-.1004	-.0116	.0279	
120.000			.4961	.3281	.2187	.2081		.0773		-.2699	-.2674	-.2276	-.0380	-.0006	
140.000										-.3193					
150.000			.4479	.3124	.2554	.2618				-.4831	-.3384	-.1362	-.0559	-.0190	
151.000									.1191						
156.000								.4811							
162.000									.1386						
165.000										-1.0674	-.2568	-.1362	-.0612	-.0211	
169.000								.5227							
174.000							.7050								
180.000	1.0880	.5986	.3558	.2761	.2323	.2407		.4063		-1.2505	-.2389	-.1372	-.0722	-.0258	
305.000			.0550	-.0541	-.0902	-.2157		-.2602		-.2568					
320.000			.0418	-.0515	-.0618	-.2452		-.2428		-.2158	-.1658	-.1036	-.0643	-.0264	.0030
340.000			.0750	-.0298	-.0282	-.1478		-.2291		-.1891					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.0560	.1323	.3227	-.1746	-.2018	-.2270	-.2028		-.1578	-.1454					
40.000	-.0180	-.0175	.0217	-.4578	-.2028	-.2149	-.1871		-.1423	-.1567					
70.000	-.1003	-.1195	-.0445	.0607	-.1208	-.1379	-.1337								
90.000	-.0595	-.0643	.0243	.1007	-.1550	-.1590	-.1489								
105.000			.0894	.1602	-.2591	-.2159	-.1902								
110.000								-.2337							
120.000	-.0185	.0296	.1887	.3050	-.2723	-.2290	-.2232	-.1938							
135.000			.2586	.3524	-.2128	-.1557	-.1928								
150.000	.0046	.0758	.2534	.3308	-.1622	-.1431	-.1849								
165.000	-.0028		.2281		.0317	-.1222	-.1865								
180.000	-.0033	.0600	.1965	.3618											
320.000	.0267	.1189	.1949	-.1965	-.2913	-.1792	-.1838								

ARC11-019 IAB1 LVAP(ELHL UNSEALD) ORB. FUSELAGE

(RETB06)

ALPHA0( 2) = -3.984 BETA0( 2) = .011

## SECTION ( 1) ORBITER FUSELAGE

## DEPENDENT VARIABLE CP

X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.1062	.4356	.0681	.0125	-.0128	.6433		-.1920		-.1520	-.1236	-.0860	-.0431	-.0057	.0274
20.000			.0808	.0115	-.0333	-.0576		-.2174		-.1694					
40.000			.1744	.0104	-.0512	-.1550		-.2401		-.2153	-.1320	-.0771	-.0447	.0017	.0279
55.000			.2358	.0516	-.0317	-.1245		-.2084		-.2390					
70.000			.2717	.0632	-.0280	-.0822		-.2078		-.2855	-.2515	-.1080	-.0315	.0233	
90.000		.4531	.3135	.0996	-.0133	-.0580		-.2174		-.3245	-.2893	-.1374	-.0399	.0122	
120.000			.3749	.2099	.1019	.0970		-.0709		-.3963	-.3234	-.2707	-.0498	-.0057	
140.000										-.4247					
150.000			.3960	.2753	.2110	.2121				-.5616	-.3003	-.1369	-.0503	-.0131	
151.000									-.0211						
156.000								.3738							
162.000									.0290						
165.000										-1.0651	-.2346	-.1279	-.0493	-.0105	
169.000								.4838							
174.000						.6729									
180.000	1.1062	.5952	.3823	.2958	.2452	.2715		.4647		-1.2196	-.2257	-.1221	-.0488	-.0110	
305.000			.2172	.0683	.0087	-.1352		-.2115		-.2141					
320.000			.1328	.0146	-.0037	-.1636		-.2237		-.2010	-.1527	-.0852	-.0377	-.0052	.0226
340.000			.1123	.0062	-.0002	-.0512		-.2032		-.1715					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	-.0337	.0630	.1408	-.1598	-.1961	-.2172	-.1830		-.1662	-.1486					
40.000	-.0058	.0111	.0072	-.2648	-.2045	-.1920	-.1735		-.1569	-.1651					
70.000	-.1109	-.1338	-.0801	.0061	-.1682	-.1746	-.1541								
90.000	-.0619	-.0771	-.0107	.0277	-.2277	-.1962	-.1641								
105.000			.0446	.0329	-.3493	-.2656	-.2119								
110.000															
120.000	-.0188	.0014	.1124	.1325	-.3938	-.3300	-.2832		-.2177						
135.000			.2072	.3579	-.3060	-.2323	-.2323		-.2014						
150.000	.0090	.0677	.2298	.4274	-.2356	-.2245	-.2203								
165.000	.0168		.2277		-.0759	-.2171	-.1810								
180.000	.0179	.0814	.2308	.4516											
320.000	-.0083	.0446	.0765	-.2840	-.2330	-.1741	-.1663								

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## IA81A - PRESSURE SOURCE DATA TABULATION

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ARC11-019 IA81 LVAP(ELHL UNSEALD) ORB. FUSELAGE

(RETB06)

ALPHA0 ( 2 ) = -3.968 BETA0 ( 3 ) = 4.081

SECTION ( 1 ) ORBITER FUSELAGE				DEPENDENT VARIABLE CP											
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.0723	.3992	.0293	-.0169	-.0587	.5909		-.2289		-.1994	-.1736	-.1504	-.0839	-.0369	-.0051
20.000			.0080	-.0534	-.0894	-.1655		-.2503		-.2111					
40.000			.0362	-.0757	-.1265	-.2384		-.2578		-.2238	-.1546	-.1060	-.0728	-.0200	.0044
55.000			.0714	-.0863	-.1440	-.2088		-.2673		-.2875					
70.000			.0964	-.0852	-.1525	-.1835		-.2955		-.3533	-.2883	-.1293	-.0422	.0118	
90.000		.2172	.1464	-.0593	-.1588	-.1829		-.3289		-.4106	-.3358	-.1543	-.0527	-.0009	
120.000			.2315	.0668	-.0370	-.0339		-.2408		-.5091	-.3828	-.3245	-.0945	-.0427	
140.000										-.5091					
150.000			.3044	.2050	.1326	.1300				-.6351	-.2973	-.1580	-.0813	-.0395	
151.000									-.1814						
156.000								.2385							
162.000									-.1150						
165.000										-1.0794	-.2502	-.1442	-.0723	-.0347	
169.000								.4083							
174.000						.6121									
180.000	1.0723	.5519	.3678	.2776	.2288	.2389		.4317		-1.2174	-.2376	-.1352	-.0723	-.0315	
305.000			.3598	.1796	.1099	-.0434		-.1437		-.1552					
320.000			.1849	.0446	.0169	-.1158		-.2196		-.2032	-.1578	-.0903	-.0342	.0076	.0477
340.000			.1033	-.0031	-.0143	-.0053		-.2355		-.2080					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.0028	.0831	.2095	-.1284	-.2447	-.2457	-.2442		-.1718	-.1510					
40.000	.0197	.0768	.1593	-.1733	-.2267	-.1950	-.2121		-.2025	-.2020					
70.000	-.1055	-.1552	-.1188	-.0416	-.2272	-.2140	-.1889								
90.000	-.0727	-.1060	-.0649	-.0406	-.2812	-.2447	-.1936								
105.000			-.0194	-.0601	-.4239	-.3161	-.2395								
110.000								-.2284							
120.000	-.0506	-.0591	.0118	-.0358	-.5461	-.4355	-.3607	-.2274							
135.000			.1217	.2285	-.4345	-.3154	-.2837								
150.000	-.0189	.0271	.1625	.4242	-.3573	-.3317	-.2695								
165.000	-.0152		.1810		-.2040	-.3090	-.1957								
180.000	-.0083	.0594	.2079	.4215											
320.000	-.0257	.0165	.0139	-.5344	-.2658	-.2421	-.2405								



ARC11-019 IAB1 LVAP(ELHL UNSEALD) ORB. FUSELAGE

(RETB06)

ALPHA( 3) = .074 BETA( 1) = -6.097

## SECTION ( 1) ORBITER FUSELAGE

## DEPENDENT VARIABLE CP

X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.0515	.4666	.0652	-.0007	-.0402	.6055		-.2274		-.1770	-.1660	-.1119	-.0680	.0156	.0677
20.000			.1430	.0399	-.0091	.0084		-.2355		-.1818					
40.000			.3534	.1262	.0530	-.0499		-.1907		-.1649	-.0977	-.0452	-.0149	.0613	.1055
55.000			.4824	.2684	.1668	.0436		-.0654		-.1149					
70.000			.5126	.2884	.1705	.0840		-.0538		-.1586	-.2416	-.0898	-.0202	.0061	
90.000		.7067	.5158	.3016	.1768	.1161		-.0391		-.1702	-.2169	-.1085	-.0312	-.0039	
120.000			.4692	.3026	.1985	.1938		.1078		-.2573	-.2930	-.2808	-.1179	-.0937	
140.000										-.3519					
150.000			.3550	.2152	.1644	.1912				-.5672	-.4464	-.1967	-.1116	-.0844	
151.000									.1110						
156.000								.4616							
162.000									.0957						
165.000										-1.2590	-.3303	-.1946	-.1121	-.0818	
169.000								.4648							
174.000						.6517									
180.000	1.0515	.4750	.2180	.1526	.1197	.1423		.2758		-1.4521	-.3009	-.1846	-.1111	-.0834	
305.000			-.0273	-.1160	-.1470	-.2510		-.2755		-.2836					
320.000			.0083	-.0870	-.1014	-.2962		-.2608		-.2474	-.2027	-.1437	-.0811	-.0335	.0210
340.000			.0678	-.0475	-.0530	-.1980		-.2492		-.1990					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.0798	.1512	.3230	-.2305	-.3364	-.2417	-.2031		-.1675	-.1572					
40.000	.0121	.0079	.0236	-.4369	-.3521	-.2254	-.2204		-.1737	-.1706					
70.000	-.1936	-.1721	-.0667	.0866	-.0935	-.1077	-.1162								
90.000	-.1411	-.1122	.0031	.1428	-.1166	-.1313	-.1444								
105.000			.0683	.2526	-.2023	-.1786	-.1753								
110.000								-.2256							
120.000	-.1296	-.0404	.1633	.3829	-.2386	-.1900	-.1759	-.1748							
135.000			.2211	.3192	-.2170	-.1518	-.1863								
150.000	-.0766	.0121	.2137	.1994	-.2070	-.1402	-.1911								
165.000	-.0634		.1759		.0522	-.0947	-.1738								
180.000	-.0676	-.0026	.1428	.2078											
320.000	.0919	.1738	.2400	-.0882	-.2686	-.1853	-.1423								

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ARC11-019 IAB1 LVAP(ELHL UNSEALD) ORB. FUSELAGE

(RETB06)

ALPHA( 3) = .072 BETA( 2) = -4.067

SECTION ( 1) ORBITER FUSELAGE		DEPENDENT VARIABLE CP													
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.0821	.4942	.0921	.0201	-.0210	.6197		-.2003		-.1617	-.1272	-.0925	-.0443	.0208	.0730
20.000			.1440	.0491	-.0041	-.0032		-.2210		-.1686					
40.000			.3133	.1023	.0301	-.0715		-.2014		-.1776	-.1057	-.0504	-.0212	.0466	.0988
55.000			.4122	.2023	.0996	-.0089		-.1146		-.1644					
70.000			.4366	.2197	.1038	.0289		-.1077		-.2094	-.2472	-.0936	-.0354	-.0075	
90.000		.6249	.4487	.2350	.1123	.0620		-.0993		-.2252	-.2467	-.1179	-.0454	-.0128	
120.000			.4323	.2650	.1645	.1650		.0531		-.2972	-.3109	-.2703	-.0942	-.0648	
140.000										-.3866					
150.000			.3514	.2176	.1692	.1908				-.5814	-.4072	-.1830	-.0906	-.0530	
151.000									.0537						
156.000								.4342							
162.000									.0606						
165.000										-1.2365	-.3072	-.1704	-.0921	-.0525	
169.000								.4607							
174.000							.6670								
180.000	1.0821	.4958	.2509	.1802	.1456	.1687		.3395		-1.4136	-.2809	-.1704	-.0900	-.0556	
305.000			.0620	-.0500	-.0909	-.2087		-.2586		-.2567					
320.000			.0712	-.0389	-.0568	-.2402		-.2379		-.2119	-.1656	-.1079	-.0601	-.0079	.0321
340.000			.1059	-.0136	-.0231	-.1440		-.2221		-.1788					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.0840	.1597	.3167	-.1549	-.3031	-.2152	-.1997		-.1625	-.1594					
40.000	.0252	.0242	.0306	-.4331	-.3120	-.2052	-.1976		-.1651	-.1641					
70.000	-.1985	-.1838	-.0887	.0533	-.1226	-.1337	-.1295								
90.000	-.1397	-.1213	-.0146	.1006	-.1537	-.1568	-.1557								
105.000			.0580	.1784	-.2478	-.2057	-.1872								
110.000								-.2354							
120.000	-.0971	-.0198	.1658	.2909	-.2794	-.2191	-.2071	-.1814							
135.000			.2283	.2877	-.2494	-.1714	-.2013								
150.000	-.0504	.0380	.2236	.2283	-.2215	-.1652	-.1919								
165.000	-.0388		.1947		-.0022	-.1426	-.1793								
180.000	-.0399	.0322	.1731	.2966											
320.000	.0783	.1552	.2152	-.1195	-.2873	-.1783	-.1652								

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OF POOR QUALITY

ARC11-019 IAB1 LVAP(ELHL UNSEALD) ORB. FUSELAGE

(RETB06)

ALPHA( 3) = .075 BETA( 3) = -.005

SECTION ( 1) ORBITER FUSELAGE		DEPENDENT VARIABLE CP													
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.0981	.4992	.0986	.0300	-.0096	.6436		-.1734		-.1414	-.1130	-.0711	-.0296	.0268	.0548
20.000			.1177	.0279	-.0154	-.0551		-.2064		-.1525					
40.000			.2083	.0337	-.0328	-.1411		-.2133		-.1912	-.1215	-.0674	-.0301	.0274	.0638
55.000			.2539	.0665	-.0159	-.1094		-.1958		-.2272					
70.000			.2650	.0628	-.0302	-.0781		-.1995		-.2828	-.2676	-.1270	-.0586	-.0153	
90.000		.4174	.2963	.0887	-.0217	-.0481		-.2043		-.3231	-.2961	-.1526	-.0618	-.0221	
120.000			.3243	.1628	.0658	.0772		-.0721		-.4128	-.3387	-.2761	-.0696	-.0327	
140.000										-.4714					
150.000			.3143	.1982	.1418	.1546				-.6402	-.3493	-.1626	-.0701	-.0390	
151.000									-.0666						
156.000								.3346							
162.000									-.0386						
165.000										-1.2045	-.2781	-.1531	-.0680	-.0353	
169.000								.4291							
174.000							.6333								
180.000	1.0981	.4907	.2846	.2089	.1644	.1962		.4026		-1.3705	-.2550	-.1468	-.0685	-.0342	
305.000			.2343	.0801	.0204	-.1129		-.1979		-.2096					
320.000			.1707	.0411	.0072	-.1513		-.2070		-.1890	-.1322	-.0761	-.0216	.0174	.0580
340.000			.1437	.0226	.0067	-.0413		-.1912		-.1547					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.0654	.0879	.1497	-.1529	-.2089	-.2074	-.1925		-.1564	-.1590					
40.000	.0395	.0463	.0357	-.2361	-.2136	-.1826	-.1683		-.1538	-.1616					
70.000	-.1965	-.1956	-.1142	-.0044	-.1719	-.1752	-.1530								
90.000	-.1319	-.1288	-.0366	.0188	-.2274	-.2016	-.1709								
105.000			.0373	.0288	-.3325	-.2558	-.2146								
110.000								-.2403							
120.000	-.0594	-.0261	.1159	.0779	-.3697	-.3040	-.2555	-.1915							
135.000			.1857	.2554	-.3196	-.2345	-.2288								
150.000	-.0199	.0399	.1999	.3616	-.2701	-.2393	-.2162								
165.000	-.0173		.1968		-.1109	-.2314	-.1757								
180.000	-.0152	.0520	.1941	.3975											
320.000	.0390	.0774	.0941	-.2601	-.2432	-.1730	-.1768								

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ARC11-019 IAB1 LVAP(ELHL UNSEALD) ORB. FUSELAGE

(RETB06)

ALPHA0 ( 3 ) = .087 BETA0 ( 4 ) = 4.063

SECTION ( 1 ) ORBITER FUSELAGE		DEPENDENT VARIABLE CP													
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.0673	.4610	.0694	.0024	-.0408	.5912		-.1995		-.1820	-.1640	-.1391	-.0759	-.0146	.0241
20.000			.0440	-.0362	-.0797	-.1625		-.2400		-.2021					
40.000			.0694	-.0616	-.1145	-.2326		-.2464		-.2126	-.1593	-.0919	-.0632	-.0004	.0320
55.000			.0857	-.0764	-.1371	-.2015		-.2591		-.2759					
70.000			.0968	-.0843	-.1524	-.1685		-.2787		-.3403	-.2972	-.1412	-.0680	-.0193	
90.000		.1918	.1328	-.0626	-.1492	-.1596		-.3047		-.3973	-.3334	-.1688	-.0727	-.0182	
120.000			.1925	.0362	-.0607	-.0357		-.2215		-.5185	-.3833	-.3014	-.0787	-.0340	
140.000										-.5570					
150.000			.2311	.1351	.0638	.0846				-.7032	-.3235	-.1747	-.0876	-.0512	
151.000									-.2189						
156.000								.2056							
162.000									-.1699						
165.000										-1.2125	-.2825	-.1667	-.0861	-.0527	
169.000								.3582							
174.000							.5772								
180.000	1.0673	.4456	.2724	.1945	.1461	.1728		.3688		-1.3672	-.2746	-.1636	-.0840	-.0580	
305.000			.3913	.2071	.1287	-.0194		-.1240		-.1419					
320.000			.2339	.0813	.0443	-.0934		-.1899		-.1820	-.1349	-.0759	-.0172	.0294	.0788
340.000			.1404	.0187	-.0011	.0063		-.2158		-.1925					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.0425	.1116	.2221	-.1142	-.2515	-.2530	-.2462		-.1650	-.1489					
40.000	.0657	.1131	.1847	-.1494	-.2325	-.1900	-.2031		-.1909	-.1904					
70.000	-.1917	-.2107	-.1595	-.0596	-.2288	-.2157	-.1884								
90.000	-.1295	-.1447	-.0878	-.0454	-.2826	-.2430	-.1936								
105.000			-.0288	-.0580	-.4256	-.3082	-.2504								
110.000								-.2498							
120.000	-.0724	-.0720	.0118	-.0125	-.5094	-.4087	-.3268	-.2053							
135.000			.1246	.1964	-.4348	-.3162	-.2760								
150.000	-.0383	.0097	.1524	.3088	-.3838	-.3388	-.2639								
165.000	-.0347		.1619		-.2341	-.3204	-.1844								
180.000	-.0362	.0281	.1823	.3510											
320.000	.0188	.0455	.0427	-.4931	-.2530	-.2373	-.2388								

ARC11-019 IA81 LVAP(ELHL UNSEALD) ORB. FUSELAGE

(RETB06)

ALPHA( 3) = .090 BETA( 5) = 6.100

## SECTION ( 1) ORBITER FUSELAGE

## DEPENDENT VARIABLE CP

X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.0248	.4395	.0381	-.0251	-.0782	.4949		-.2401		-.2326	-.2109	-.1680	-.1057	-.0530	-.0155
20.000			-.0040	-.0790	-.1232	-.2417		-.2714		-.2443					
40.000			-.0066	-.1150	-.1666	-.2866		-.2645		-.2390	-.1792	-.1252	-.0825	-.0191	.0214
55.000			-.0029	-.1388	-.1889	-.2385		-.2815		-.2906					
70.000			.0109	-.1499	-.2080	-.2211		-.3069		-.3704	-.3150	-.1490	-.0682	-.0218	
90.000		.0667	.0503	-.1330	-.2154	-.2158		-.3505		-.4326	-.3509	-.1702	-.0645	-.0260	
120.000			.1142	-.0373	-.1240	-.0967		-.2937		-.5591	-.4049	-.3107	-.0949	-.0461	
140.000										-.5908					
150.000			.1685	.0827	.0165	.0282				-.7313	-.3308	-.1834	-.1070	-.0687	
151.000									-.3140						
156.000								.1245							
162.000									-.2587						
165.000										-1.2174	-.2891	-.1824	-.1086	-.0735	
169.000								.3075							
174.000						.4970									
180.000	1.0248	.3933	.2366	.1539	.1142	.1494		.3166		-1.4183	-.2938	-.1845	-.1144	-.0803	
305.000			.4639	.2694	.1907	.0356		-.0687		-.0974					
320.000			.2672	.0951	.0556	-.0787		-.1949		-.1681	-.1373	-.0751	-.0112	.0367	.0874
340.000			.1409	.0018	-.0162	.0096		-.2518		-.2204					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.0077	.0881	.2093	-.1123	-.2606	-.2601	-.2458		-.1694	-.1424					
40.000	.0752	.1319	.2083	-.1102	-.2522	-.2002	-.2195		-.1907	-.1959					
70.000	-.1816	-.2179	-.1722	-.0732	-.2490	-.2246	-.1948								
90.000	-.1344	-.1555	-.1042	-.0684	-.3030	-.2702	-.2074								
105.000			-.0461	-.0907	-.4336	-.3285	-.2443								
110.000								-.2295							
120.000	-.0816	-.0873	-.0160	-.1447	-.5841	-.4506	-.3630	-.2131							
135.000			.0654	.1055	-.5152	-.3601	-.3028								
150.000	-.0610	-.0192	.0960	.3362	-.4754	-.3980	-.2902								
165.000	-.0647		.1161		-.3360	-.3680	-.1926								
180.000	-.0615	.0024	.1458	.2939											
320.000	.0130	.0499	.0389	-.5358	-.2490	-.2395	-.2501								

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ARC11-019 IAB1 LVAP(ELHL UNSEALD) ORB. FUSELAGE

(RETB06)

ALPHA0(4) = 4.240 BETA0(1) = -4.061

SECTION ( 1 ) ORBITER FUSELAGE				DEPENDENT VARIABLE CP											
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.0702	.5581	.1337	.0444	-.0022	.6087		-.1749		-.1397	-.1116	-.0703	-.0193	.0500	.1070
20.000			.1954	.0804	.0179	.0149		-.1987		-.1419					
40.000			.3635	.1439	.0645	-.0464		-.1642		-.1371	-.0846	-.0270	.0066	.0780	.1386
55.000			.4368	.2270	.1286	.0112		-.0887		-.1376					
70.000			.4374	.2202	.1074	.0377		-.0930		-.1950	-.2834	-.1095	-.0600	-.0346	
90.000		.5921	.4214	.2191	.1010	.0588		-.0893		-.2204	-.2580	-.1452	-.0706	-.0452	
120.000			.3651	.1995	.1032	.1207		.0392		-.3394	-.3494	-.3271	-.1526	-.1399	
140.000										-.4520					
150.000			.2640	.1317	.0911	.1244				-.6687	-.4700	-.2123	-.1124	-.0893	
151.000									.0132						
156.000								.4019							
162.000									-.0017						
165.000										-1.3740	-.3436	-.1906	-.1039	-.0766	
169.000								.4152							
174.000							.6325								
180.000	1.0702	.3901	.1651	.1026	.0736	.1048		.2851		-1.5466	-.3019	-.1759	-.0976	-.0666	
305.000			.0816	-.0398	-.0802	-.1929		-.2374		-.2506					
320.000			.1095	-.0070	-.0337	-.2172		-.2088		-.1956	-.1544	-.0928	-.0431	.0189	.0758
340.000			.1444	.0110	-.0015	-.1199		-.1875		-.1549					
X/LB															
	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1291	.1903	.3406	-.1484	-.2175	-.2043	-.1822		-.1334	-.1277					
40.000	.0748	.0695	.0755	-.4452	-.1953	-.2207	-.1843		-.1386	-.1516					
70.000	-.2781	-.2312	-.1178	.0528	-.1128	-.1128	-.1168								
90.000	-.2048	-.1711	-.0391	.1056	-.1413	-.1450	-.1511								
105.000			.0312	.1965	-.2276	-.1985	-.1822								
110.000								-.2306							
120.000	-.1732	-.0787	.1510	.2517	-.2831	-.2264	-.1901	-.1790							
135.000			.2107	.2174	-.2752	-.1932	-.2074								
150.000	-.0803	.0079	.2023	.1486	-.2641	-.1827	-.1927								
165.000	-.0629		.1780		-.0318	-.1532	-.1737								
180.000	-.0571	.0195	.1563	.2528											
320.000	.1222	.1811	.2308	-.1577	-.2948	-.1832	-.1632								

ARC11-019 IAB1 LVAP(ELHL UNSEALD) ORB. FUSELAGE

(RETB05)

ALPHA0( 4) = 4.239 BETA0 ( 2) = -.008

SECTION ( 1) ORBITER FUSELAGE		DEPENDENT VARIABLE CP													
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.0880	.5706	.1470	.0550	.0092	.6569		-.1504		-.1185	-.0935	-.0534	-.0108	.0515	.0915
20.000			.1628	.0565	.0024	-.0399		-.1768		-.1311					
40.000			.2498	.0707	-.0034	-.1203		-.1826		-.1632	-.1087	-.0487	-.0145	.0542	.1072
55.000			.2709	.0849	.0003	-.0961		-.1747		-.2111					
70.000			.2688	.0707	-.0312	-.0697		-.1858		-.2743	-.3107	-.1399	-.0817	-.0443	
90.000		.3878	.2752	.0792	-.0254	-.0419		-.1858		-.3070	-.2976	-.1630	-.0827	-.0459	
120.000			.2704	.1144	.0299	.0561		-.0628		-.4243	-.3600	-.2979	-.0993	-.0705	
140.000										-.5225					
150.000			.2382	.1136	.0725	.1022				-.7149	-.3961	-.1825	-.0789	-.0512	
151.000									-.1006						
156.000								.3112							
162.000									-.0969						
165.000										-1.3439	-.3044	-.1667	-.0731	-.0464	
169.000								.3856							
174.000							.6000								
180.000	1.0880	.3899	.1955	.1283	.0908	.1336		.3487		-1.5022	-.2809	-.1573	-.0778	-.0464	
305.000			.2604	.1047	.0409	-.0901		-.1747		-.1901					
320.000			.2227	.0816	.0462	-.1200		-.1743		-.1576	-.1106	-.0507	.0002	.0474	.0962
340.000			.1912	.0517	.0315	-.0183		-.1627		-.1350					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.0972	.1175	.1545	-.1365	-.2004	-.1895	-.1719			-.1553	-.1449				
40.000	.0820	.0855	.0695	-.2129	-.2135	-.1753	-.1609			-.1424	-.1563				
70.000	-.2756	-.2404	-.1399	-.0050	-.1663	-.1633	-.1426								
90.000	-.1981	-.1740	-.0560	.0248	-.2167	-.1874	-.1641								
105.000			.0275	.0248	-.3039	-.2414	-.2044								
110.000								-.2305							
120.000	-.1096	-.0460	.1135	.0208	-.3510	-.2756	-.2279	-.1684							
135.000			.1736	.1916	-.3289	-.2379	-.2190								
150.000	-.0432	.0238	.1762	.2738	-.2828	-.2374	-.2008								
165.000	-.0395		.1678		-.1344	-.2389	-.1626								
180.000	-.0353	.0332	.1652	.3644											
320.000	.0855	.1088	.1149	-.2319	-.2403	-.1782	-.1679								

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## IAB1A - PRESSURE SOURCE DATA TABULATION

PAGE 49

ARC11-019 IAB1 LVAP(ELHL UNSEALD) ORB. FUSELAGE

(RETB06)

ALPHA0( 4) = 4.236 BETA0 ( 3) = 4.070

SECTION ( 1) ORBITER FUSELAGE				DEPENDENT VARIABLE CP											
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.0551	.5285	.1071	.0205	-.0303	.5958		-.1825		-.1702	-.1543	-.1254	-.0571	.0075	.0546
20.000			.0843	-.0161	-.0669	-.1511		-.2142		-.1914					
40.000			.0944	-.0405	-.0981	-.2189		-.2227		-.2052	-.1537	-.0890	-.0503	.0212	.0699
55.000			.0923	-.0638	-.1325	-.1998		-.2493		-.2711					
70.000			.0923	-.0782	-.1542	-.1630		-.2610		-.3343	-.3085	-.1566	-.0868	-.0486	
90.000		.1606	.1146	-.0638	-.1468	-.1492		-.2834		-.3800	-.3359	-.1758	-.0831	-.0470	
120.000			.1512	.0051	-.0781	-.0478		-.1977		-.5143	-.3876	-.2913	-.0760	-.0428	
140.000										-.5922					
150.000			.1566	.0667	.0135	.0367				-.7664	-.3581	-.1832	-.0877	-.0538	
151.000									-.2541						
156.000								.1867							
162.000									-.2281						
165.000										-1.3142	-.3064	-.1731	-.0908	-.0623	
169.000								.3182							
174.000							.5263								
180.000	1.0551	.3395	.1821	.1120	.0675	.1064		.3198		-1.5245	-.3027	-.1753	-.0998	-.0728	
305.000			.4296	.2412	.1628	.0124		-.0907		-.1194					
320.000			.2979	.1194	.0775	-.0642		-.1510		-.1447	-.1101	-.0434	.0106	.0630	.1217
340.000			.1950	.0453	.0188	.0177		-.1930		-.1728					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.0757	.1363	.2385	-.1025	-.2465	-.2560	-.2262		-.1508	-.1216					
40.000	.1101	.1431	.2073	-.1363	-.2364	-.1841	-.1861		-.1737	-.1674					
70.000	-.2632	-.2600	-.1778	-.0629	-.2152	-.2057	-.1761								
90.000	-.1829	-.1845	-.0979	-.0523	-.2779	-.2264	-.1909								
105.000			-.0371	-.0423	-.3891	-.2941	-.2326								
110.000								-.2479							
120.000	-.0933	-.0810	.0147	.0090	-.4660	-.3672	-.2858	-.1847							
135.000			.1108	.2200	-.4353	-.3044	-.2631								
150.000	-.0600	-.0017	.1367	.2126	-.3962	-.3286	-.2510								
165.000	-.0553		.1451		-.2581	-.3096	-.1794								
180.000	-.0616	.0163	.1588	.2752											
320.000	.0619	.0830	.0680	-.4946	-.2465	-.2273	-.2315								

ORIGINAL PAGE IS  
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ORIGINAL PAGE IS  
OF POOR QUALITY



## ARC11-019 1A81 LVAP(ELHL UNSEALED) ORB. FUSELAGE

(RETB06)

ALPHA0( 5) = 8.382 BETA0( 1) = -.008

SECTION ( 1) ORBITER FUSELAGE				DEPENDENT VARIABLE CP											
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.0630	.6335	.1999	.0841	.0266	.6572		-.1273		-.0938	-.0674	-.0305	.0174	.0814	.1158
20.000			.2.05	.0867	.0276	-.0319		-.1575		-.1075					
40.000			.2682	.1015	.0266	-.0982		-.1522		-.1302	-.0832	-.0252	.0131	.0793	.1353
55.000			.2908	.1026	.0129	-.0866		-.1548		-.1978					
70.000			.2602	.0709	-.0277	-.0638		-.1728		-.2680	-.3576	-.1533	-.1047	-.0740	
90.000		.3592	.2517	.0641	-.0361	-.0465		-.1802		-.2996	-.3156	-.1847	-.1079	-.0835	
120.000			.2116	.0630	-.0209	.0217		-.0713		-.4463	-.3902	-.3374	-.1544	-.1292	
140.000										-.5706					
150.000			.1503	.0414	.0007	.0480				-.7784	-.4364	-.1963	-.0966	-.0749	
151.000									-.1387						
156.000								.2825							
162.000									-.1508						
165.000										-1.4669	-.3287	-.1790	-.0845	-.0639	
169.000								.3412							
174.000							.5602								
180.000	1.0630	.2756	.1017	.0487	.0175	.0737		.2952		-1.6620	-.2948	-.1679	-.0856	-.0586	
305.000			.2787	.1203	.0549	-.0754		-.1580		-.1858					
320.000			.2666	.1097	.0644	-.0974		-.1455		-.1337	-.0819	-.0311	.0226	.0696	.1279
340.000			.2350	.3803	.0491	-.0061		-.1418		-.1116					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1311	.1445	.1738	-.1384	-.2004	-.1753	-.1556		-.1413	-.1402					
40.000	.1148	.1172	.0959	-.2040	-.2183	-.1727	-.1541		-.1345	-.1532					
70.000	-.3582	-.2997	-.1702	-.0024	-.1652	-.1548	-.1446								
90.000	-.2672	-.2169	-.0803	.0259	-.2115	-.1884	-.1661								
105.000			.0170	.0537	-.2862	-.2294	-.1976								
110.000								-.2243							
120.000	-.1718	-.0750	.0896	.0423	-.3339	-.2694	-.2139	-.1683							
135.000			.1136	.1565	-.3392	-.2453	-.2233								
150.000	-.0847	-.0177	.1346	.3376	-.3203	-.2537	-.2092								
165.000	-.0716		.1351		-.1606	-.2599	-.1605								
180.000	-.0622	.0054	.1372	.3855											
320.000	.1261	.1422	.1440	-.2073	-.2373	-.1682	-.1547								

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## 1A81A - PRESSURE SOURCE DATA TABULATION

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ARC11-019 1A81 LVAP(ELHL UNSEALD) ORB. FUSELAGE

(RETB06)

ALPHA0( 6) = 10.453 BETA0 ( 1) = .004

SECTION ( 1) ORBITER FUSELAGE		DEPENDENT VARIABLE CP													
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.0521	.6610	.2123	.1016	.0333	.6663		-.1186		-.0852	-.0489	-.0225	.0333	.0816	.1311
20.000			.2320	.1122	.0259	-.0231		-.1307		-.1022					
40.000			.3067	.1286	.0376	-.0802		-.1286		-.1219	-.0616	-.0172	.0296	.0869	.1506
55.000			.3019	.1207	.0211	-.0744		-.1434		-.1954					
70.000			.2603	.0831	-.0320	-.0640		-.1583		-.2645	-.3501	-.1656	-.1054	-.0913	
90.000		.3422	.2363	.0624	-.0474	-.0486		-.1631		-.3034	-.3204	-.1810	-.1128	-.1024	
120.000			.1824	.0391	-.0358	-.0015		-.0659		-.4419	-.4073	-.3514	-.1809	-.1687	
140.000										-.5768					
150.000			.1104	.0073	-.0221	.0256				-.7994	-.4508	-.1963	-.0987	-.0730	
151.000									-.1533						
156.000								.2766							
162.000									-.1773						
165.000										-1.4876	-.3352	-.1710	-.0886	-.0577	
169.000								.3297							
174.000							.5443								
180.000	1.0521	.2267	.0582	.0142	-.0067	.0462		.2750		-1.6779	-.3103	-.1593	-.0823	-.0561	
305.000			.2870	.1305	.0731	-.0757		-.1376		-.1690					
320.000			.2977	.1252	.0863	-.0894		-.1288		-.1102	-.0739	-.0107	.0344	.0840	.1427
340.000			.2627	.0933	.0678	-.0015		-.1294		-.0907					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1480	.1594	.1880	-.1378	-.1970	-.1677	-.1561		-.1225	-.1215					
40.000	.1374	.1287	.1170	-.2030	-.2293	-.1687	-.1471		-.1251	-.1470					
70.000	-.3822	-.3232	-.1730	-.0026	-.1551	-.1544	-.1329								
90.000	-.2898	-.2411	-.0819	.0330	-.1938	-.1953	-.1519								
105.000			.0165	.0680	-.2770	-.2378	-.1919								
110.000								-.2309							
120.000	-.1886	-.0782	.0784	.1187	-.3259	-.2547	-.2061	-.1734							
135.000			.0839	.2516	-.3386	-.2352	-.2177								
150.000	-.1033	-.0258	.1152	.4238	-.3253	-.2410	-.2056								
165.000	-.0806		.1290		-.1756	-.2494	-.1660								
180.000	-.0721	.0054	.1348	.4063											
320.000	.1308	.1604	.1459	-.1917	-.2500	-.1677	-.1607								

ARC11-019 IAB1 LVAP(ELHL UNSEALD) ORB. FUSELAGE

(RETB07) ( 02 OCT 74 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 976.0000 IN. XT  
 LREF = 1297.0000 INCHES YMRP = .0000 IN. YT  
 BREF = 1297.0000 INCHES ZMRP = 400.0000 IN. ZT  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

MACH = .900 RN/FT = 2.250  
 ELV-1B = 9.000 ELV-OB = 4.000  
 RUDDER = .000 SPDBRK = .000

ALPHA( 1 ) = -11.207 BETA0 ( 1 ) = -4.037

SECTION ( 1 ) ORBITER FUSELAGE				DEPENDENT VARIABLE CP											
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.2053	.5603	.1644	.1152	.1172	.7823		-.4842		-.2960	-.2858	-.1472	-.0585	.0406	.0895
20.000			.2106	.1341	.1137	.3157		-.6036		-.2991					
40.000			.3723	.1629	.1083	.0658		-.6829		-.2999	-.4255	-.1013	-.0305	.0640	.1060
55.000			.4808	.2567	.1633	.0417		-.2883		-.2845					
70.000			.5348	.2955	.1760	.0821		-.1709		-.3438	-.7772	-.0824	.0448	.0978	
90.000		.7622	.5724	.3351	.1979	.1213		-.1074		-.3184	-.7135	-.1588	.0383	.0871	
120.000			.6018	.4223	.2975	.2905		.1697		-.2970	-.6525	-.3558	.0310	.0637	
140.000										-.2414					
150.000			.5654	.4169	.3444	.3634				-.4691	-.9169	-.2640	.0226	.0375	
151.000									.3090						
156.000								.6393							
162.000									.3629						
165.000										-.8752	-.8169	-.1611	.0076	.0294	
169.000								.6970							
174.000						.8575									
180.000	1.2053	.7348	.4749	.3858	.3281	.3553		.6043		-.9636	-.7810	-.1146	-.0082	.0175	
305.000			.1746	.0553	.0192	-.1135		-.6255		-.4294					
320.000			.1640	.0610	.0661	-.0608		-.6617		-.3595	-.3495	-.1472	-.0539	.0079	.0495
340.000			.1948	.0883	.1088	.1857		-.5778		-.3329					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1041	.2157	.4419	.0234	-.3357	-.3045	-.3008		-.2523	-.2531					
40.000	.0341	.0433	.1264	-.2975	-.4515	-.2726	-.2638		-.2485	-.2258					
70.000	-.0129	-.0698	.0380	.1395	-.1703	-.3730	-.1853								
90.000	.0218	-.0113	.1079	.1763	-.2188	-.3315	-.2307								
105.000			.1744	.2275	-.3249	-.3468	-.3193								
110.000								-.2785							
120.000	.0495	.0818	.2728	.3393	-.3511	-.3532	-.3913	-.2561							
135.000			.3454	.4217	-.2238	-.1991	-.2642								
150.000	.0548	.1302	.3462	.4494	-.1157	-.1367	-.2384								
165.000	.0568		.3224		.0932	-.0855	-.2415								
180.000	.0525	.1214	.3028	.4944											
320.000	.0614	.2217	.3551	.0278	-.3103	-.2823	-.2446								

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## IAB1A - PRESSURE SOURCE DATA TABULATION

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ARC11-019 IAB1 LVAP(ELHL UNSEALED) ORB. FUSELAGE

(RET807)

ALPHA0( 1) = -8.684 BETA0( 2) = -2.018

SECTION ( 1) ORBITER FUSELAGE		DEPENDENT VARIABLE CP													
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.2156	.5636	.1693	.1193	.1160	.7787		-.5715		-.2768	-.2565	-.1254	-.0394	.0415	.0717
20.000			.1988	.1232	.1036	.2787		-.6069		-.2914					
40.000			.3237	.1321	.0870	.0296		-.7452		-.3019	-.4091	-.0955	-.0301	.0508	.0829
55.000			.4111	.1933	.1090	-.0060		-.3584		-.4005					
70.000			.4579	.2220	.1109	.0283		-.2379		-.4423	-.7866	-.0959	.0327	.0860	
90.000		.6670	.5001	.2604	.1280	.0623		-.1778		-.4183	-.8098	-.1545	.0300	.0748	
120.000			.5512	.3611	.2384	.2386		.1017		-.4126	-.7099	-.2545	.0264	.0523	
140.000										-.4164					
150.000			.5438	.3983	.3245	.3436				-.7592	-.9039	-.1650	.0276	.0395	
151.000									.2569						
156.000								.5955							
162.000									.3230						
165.000										-.8912	-.7978	-.0968	.0203	.0383	
169.000								.6804							
174.000						.8483									
180.000	1.2156	.7359	.4890	.3951	.3386	.3623		.6312		-.9666	-.8551	-.0727	.0114	.0325	
305.000			.2453	.1001	.0538	-.0817		-.5832		-.3796					
320.000			.1999	.0850	.0836	-.0185		-.8974		-.3186	-.3365	-.1254	-.0277	.0205	.0535
340.000			.2092	.0990	.1164	.2238		-.6008		-.3062					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.0709	.1546	.3150	-.0626	-.3227	-.2822	-.2838		-.2350	-.2320					
40.000	.0244	.0348	.0438	-.4144	-.3669	-.2525	-.2570		-.2324	-.2331					
70.000	-.0132	-.0630	.0194	.1071	-.2124	-.4058	-.2108								
90.000	.0216	-.0101	.0864	.1349	-.2693	-.3734	-.2597								
105.000			.1504	.1747	-.3866	-.4062	-.3462								
110.000								-.2734							
120.000	.0529	.0732	.2325	.2538	-.4302	-.4177	-.4279	-.2614							
135.000			.3135	.4214	-.2884	-.2558	-.3331								
150.000	.0649	.1267	.3309	.5062	-.1652	-.1933	-.2804								
165.000	.0649		.3236		.0264	-.1530	-.2347								
180.000	.0638	.1314	.3158	.5445											
320.000	.0317	.1655	.2795	-.0393	-.2957	-.2465	-.2343								

ARC11-019 IAB1 LVAP(ELHL UNSEALD) ORB. FUSELAGE

(RET807)

ALPHA0( 1) = -6.128 BETA0( 3) = .034

SECTION ( 1) ORBITER FUSELAGE		DEPENDENT VARIABLE CP													
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.2153	.5621	.1678	.1191	.1121	.7857		-.5293		-.2899	-.2411	-.1344	-.0342	.0357	.0665
20.000			.1784	.1117	.0916	.2385		-.5809		-.3066					
40.000			.2710	.1075	.0603	-.0025		-.8377		-.3124	-.3897	-.0944	-.0192	.0442	.0754
55.000			.3356	.1372	.0557	-.0483		-.4216		-.5045					
70.000			.3738	.1496	.0495	-.0213		-.2957		-.5127	-.8410	-.1204	.0368	.0802	
90.000		.5728	.4207	.1883	.0595	.0037		-.2357		-.5123	-.8953	-.2434	.0415	.0671	
120.000			.4877	.3042	.1771	.1838		.0355		-.5162	-.7906	-.3528	.0123	.0423	
140.000										-.5740					
150.000			.5105	.3800	.2971	.3135				-.8472	-.9260	-.1421	.0245	.0355	
151.000									.1944						
156.000								.5450							
162.000									.2722						
165.000										-.8806	-.8317	-.0880	.0234	.0382	
169.000								.6612							
174.000							.8166								
180.000	1.2153	.7283	.4956	.3997	.3381	.3639		.6484		-.9698	-.9648	-.0586	.0237	.0371	
305.000			.3127	.1523	.0935	-.0549		-.5014		-.2896					
320.000			.2358	.1075	.1006	.0123		-.8071		-.2869	-.3819	-.1100	-.0211	.0313	.0653
340.000			.2192	.1044	.1213	.2533		-.6053		-.2640					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.0696	.1090	.1808	-.0894	-.3027	-.3193	-.2614		-.2368	-.2303					
40.000	.0313	.0518	.0597	-.2485	-.3108	-.2892	-.2711		-.2314	-.2406					
70.000	-.0082	-.0608	.0047	.0763	-.2481	-.4427	-.2451								
90.000	.0220	-.0105	.0724	.1015	-.3139	-.4195	-.3188								
105.000			.1344	.1127	-.4466	-.4396	-.4619								
110.000								-.2676							
120.000	.0491	.0624	.1975	.1750	-.5182	-.4658	-.5457	-.2804							
135.000			.2923	.4129	-.3688	-.3025	-.4061								
150.000	.0618	.1232	.3186	.5096	-.2338	-.2606	-.3165								
165.000	.0630		.3198		-.0346	-.2214	-.2334								
180.000	.0649	.1375	.3225	.5642											
320.000	.0197	.0895	.1282	-.1894	-.3274	-.2746	-.2396								

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## IABIA - PRESSURE SOURCE DATA TABULATION

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ARC11-019 IAB1 LVAP(ELHL UNSEALD) ORB. FUSELAGE

(RET807)

ALPHA0( 1) = -6.115 BETA0 ( 4) = 2.098

SECTION ( 1) ORBITER FUSELAGE		DEPENDENT VARIABLE CP													
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.2077	.5528	.1551	.1125	.0983	.7898		-.5774		-.2719	-.2355	-.1475	-.0502	.0215	.0527
20.000			.1524	.0901	.0723	.1924		-.6141		-.3042					
40.000			.2148	.0699	.0278	-.0416		-.8965		-.3383	-.3474	-.1114	-.0269	.0335	.0620
55.000			.2615	.0761	.0033	-.0873		-.4733		-.5282					
70.000			.2974	.0812	-.0122	-.0698		-.3515		-.5915	-.8073	-.2183	.0424	.0761	
90.000	.4691		.3448	.1164	-.0064	-.0510		-.2922		-.5837	-.5659	-.4191	.0509	.0626	
120.000			.4239	.2430	.1130	.1225		-.0358		-.6060	-.8676	-.3672	-.0111	.0331	
140.000										-.7874					
150.000			.4705	.3519	.2636	.2804				-.8949	-.9282	-.0792	-.0033	.0252	
151.000									.1300						
156.000								.4963							
162.000									.2228						
165.000										-.8813	-.8757	-.0695	.0025	.0318	
169.000								.6395							
174.000							.8004								
180.000	1.2077	.7131	.4899	.3918	.3360	.3560		.6457		-.9683	-.8649	-.0591	.0099	.0357	
305.000			.3828	.2038	.1368	-.0212		-.4272		-.2553					
320.000			.2659	.1239	.1079	.0305		-.6672		-.2755	-.4166	-.1129	-.0126	.0372	.0907
340.000			.2241	.1045	.1142	.2761		-.5740		-.2522					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.0636	.1157	.2027	-.0496	-.2891	-.2921	-.2970		-.2576	-.2435					
40.000	.0469	.1087	.2097	-.0663	-.2794	-.2801	-.2721		-.2698	-.2717					
70.000	-.0027	-.0617	-.0139	.0517	-.2796	-.4779	-.2683								
90.000	.0233	-.0108	.0539	.0711	-.3476	-.4647	-.3345								
105.000			.1113	.0707	-.4847	-.4814	-.4553								
110.000								-.2522							
120.000	.0392	.0508	.1644	.0897	-.5992	-.5473	-.6132	-.2775							
135.000			.2643	.3553	-.4465	-.4056	-.4543								
150.000	.0512	.1140	.2942	.5095	-.2941	-.3478	-.3490								
165.000	.0559		.3035		-.0863	-.2873	-.2254								
180.000	.0594	.1345	.3151	.5633											
320.000	.0156	.0566	.0532	-.3538	-.3309	-.2908	-.2759								

ORIGINAL PAGE IS  
OF POOR QUALITY

ARC11-019 IAB1 LVAP(ELHL UNSEALED) ORB. FUSELAGE

(RETB07)

ALPHA0 (1) = -6.107 BETA0 (5) = 4.143

## SECTION (1) ORBITER FUSELAGE

## DEPENDENT VARIABLE CP

X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.1916	.5324	.1375	.0937	.0821	.7667		-.5229		-.3224	-.2651	-.1893	-.0787	.0000	.0359
20.000			.1202	.0596	.0480	.1412		-.6089		-.3399					
40.000			.1549	.0302	-.0011	-.0905		-.9182		-.3759	-.3331	-.1435	-.0519	.0217	.0468
55.000			.1908	.0186	-.0395	-.1249		-.5244		-.5632					
70.000			.2173	.0182	-.0631	-.1062		-.3976		-.6360	-.4793	-.3619	.0143	.0790	
90.000		.3602	.2682	.0461	-.0681	-.0999		-.3410		-.6364	-.5139	-.5064	-.0334	.0616	
120.000			.3571	.1769	.0496	.0703		-.1050		-.6857	-.7339	-.4495	-.0787	.0286	
140.000										-.8972					
150.000			.4301	.3205	.2257	.2448			.0691	-.9302	-.9186	-.1151	-.0461	.0069	
151.000															
156.000								.4482							
162.000									.1749						
165.000										-.8808	-.9275	-.0740	-.0299	.0108	
169.000								.6059							
174.000						.7760									
180.000	1.1916	.6934	.4897	.3882	.3266	.3509		.6307		-.9516	-.8128	-.0671	-.0182	.0185	
305.000			.4550	.2589	.1815	.0238		-.3461		-.2542					
320.000			.2934	.1355	.1173	.0558		-.6860		-.2748	-.5983	-.1050	-.0109	.0445	.1142
340.000			.2226	.1045	.1083	.3000		-.5465		-.2686					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.0565	.1433	.2769	.0262	-.3035	-.3016	-.3083		-.2706	-.2405					
40.000	.0557	.1530	.2997	.0057	-.2973	-.2880	-.2827		-.2821	-.2760					
70.000	.0007	-.0532	-.0264	.0363	-.3155	-.5128	-.3013								
90.000	.0170	-.0175	.0297	.0467	-.3826	-.5050	-.3755								
105.000			.0856	.0452	-.5217	-.5228	-.4722								
110.000								-.2450							
120.000	.0309	.0378	.1303	.0204	-.6751	-.6298	-.6807	-.2738							
135.000			.2305	.3262	-.5031	-.5009	-.5157								
150.000	.0414	.0959	.2661	.5211	-.3477	-.4423	-.4155								
165.000	.0429		.2839		-.1291	-.3623	-.2380								
180.000	.0456	.1245	.3067	.5416											
320.000	.0181	.0696	.0754	-.4434	-.3655	-.2986	-.2924								

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## IAB1A - PRESSURE SOURCE DATA TABULATION

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ARC11-019 IAB1 LVAP(ELHL UNSEALD) ORB. FUSELAGE

(RETB07)

ALPHA0 ( 2 ) = -4.084 BETA0 ( 1 ) = -6.127

SECTION ( 1 ) ORBITER FUSELAGE		DEPENDENT VARIABLE CP													
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.1842	.5747	.1547	.1015	.0925	.7816		-.4285		-.3130	-.2988	-.1751	-.0717	.0484	.1137
20.000			.2255	.1395	.1006	.3409		-.5230		-.2999					
40.000			.4214	.1979	.1264	.0936		-.5950		-.3876	-.4012	-.1182	-.0234	.0781	.1402
55.000			.5497	.3235	.2132	.0932		-.2026		-.2354					
70.000			.6000	.3600	.2287	.1259		-.0957		-.2157	-.6897	-.0970	.0369	.0858	
90.000		.8256	.6237	.3930	.2456	.1692		-.0287		-.1948	-.6669	-.1654	.0300	.0754	
120.000			.6134	.4314	.3079	.3060		.2286		-.2149	-.5938	-.6499	-.0013	.0276	
140.000										-.1926					
150.000			.5253	.3726	.3094	.3329				-.2954	-.9960	-.3259	-.0071	.0026	
151.000									.3357						
156.000								.6586							
162.000									.3705						
165.000										-.8840	-.8541	-.2460	-.0214	-.0051	
169.000								.6856							
174.000							.8358								
180.000	1.1842	.6762	.3955	.3104	.2687	.2963		.5386		-1.0503	-.8607	-.1696	-.0406	-.0151	
305.000			.0898	-.0151	-.0310	-.1689		-.6761		-.3916					
320.000			.1241	.0130	.0265	-.1408		-.5429		-.3654	-.3537	-.1896	-.0888	-.0074	.0579
340.000			.1783	.0539	.0859	.1294		-.4579		-.3439					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1256	.2371	.4708	.0452	-.3319	-.2945	-.2939		-.2482	-.2421					
40.000	.0491	.0576	.1542	-.2832	-.4637	-.2926	-.2589		-.2376	-.2263					
70.000	-.0697	-.1490	.0237	.1570	-.1354	-.3420	-.1404								
90.000	-.0358	-.0841	.0966	.2086	-.1766	-.2953	-.1542								
105.000			.1688	.2730	-.2796	-.3104	-.1839								
110.000								-.2884							
120.000	-.0300	.0256	.2831	.3585	-.3042	-.2812	-.2382	-.2370							
135.000			.3405	.3881	-.2177	-.1550	-.2081								
150.000	-.0096	.0870	.3320	.3289	-.1270	-.0904	-.2081								
165.000	-.0015		.2965		.1240	-.0381	-.2347								
180.000	-.0034	.0840	.2638	.3973											
320.000	.1093	.2716	.3960	.0979	-.3185	-.2939	-.2494								



ARC11-019 1A81 LVAP(ELHL UNSEALD) ORB. FUSELAGE

(RETB07)

ALPHA( 2) = -4.075 BETA( 2) = -4.085

## SECTION ( 1) ORBITER FUSELAGE

## DEPENDENT VARIABLE CP

X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.2098	.5914	.1728	.1143	.1049	.7797		-.4806		-.3078	-.2908	-.1637	-.0569	.0470	.1060
20.000			.2216	.1342	.1064	.3195		-.5892		-.2936					
40.000			.3815	.1687	.1068	.0707		-.8636		-.2952	-.4091	-.1156	-.0239	.0677	.1256
55.000			.4835	.2591	.1586	.0460		-.2734		-.2733					
70.000			.5284	.2882	.1651	.0771		-.1633		-.3397	-.7594	-.1530	.0324	.0769	
90.000		.7503	.5550	.3239	.1808	.1162		-.0969		-.3117	-.7075	-.2495	.0324	.0704	
120.000			.5730	.3882	.2673	.2668		.1740		-.3100	-.6498	-.6338	.0332	.0447	
140.000										-.3211					
150.000			.5139	.3718	.3005	.3276				-.5527	-.9763	-.4066	.0321	.0251	
151.000									.2971						
156.000								.6317							
162.000									.3467						
165.000										-.8900	-.8437	-.3177	.0156	.0194	
169.000								.6812							
174.000							.8449								
180.000	1.2098	.6909	.4233	.3350	.2854	.3156		.5868		-1.0314	-.8237	-.2572	-.0047	.0129	
305.000			.1689	.0386	.0069	-.1232		-.6272		-.3883					
320.000			.1687	.0497	.0568	-.0666		-.6366		-.3388	-.3552	-.1595	-.0699	.0171	.0635
340.000			.2032	.0754	.1024	.1851		-.5740		-.3226					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1298	.2313	.4482	.0376	-.3356	-.3013	-.3001		-.2479	-.2501					
40.000	.0569	.0613	.1391	-.2947	-.4456	-.2864	-.2590		-.2403	-.2241					
70.000	-.0634	-.1409	.0084	.1286	-.1814	-.3988	-.1745								
90.000	-.0277	-.0749	.0832	.1697	-.2328	-.3597	-.2202								
105.000			.1526	.2215	-.3421	-.3842	-.3039								
110.000								-.2861							
120.000	.0003	.0364	.2572	.3216	-.3842	-.3604	-.3649	-.2457							
135.000			.3251	.4017	-.2741	-.2198	-.2677								
150.000	.0210	.0997	.3217	.3856	-.1635	-.1580	-.2515								
165.000	.0225		.2994		.0533	-.1153	-.2492								
180.000	.0214	.1000	.2760	.4558											
320.000	.0947	.2473	.3685	.0505	-.3178	-.2778	-.2507								

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## IABIA - PRESSURE SOURCE DATA TABULATION

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ARC11-019 IAB1 LVAP(ELHL UNSEALD) ORB. FUSELAGE

(RET307)

ALPHA0 ( 2 ) = -4.057 BETA0 ( 3 ) = .023

## SECTION ( 1 ) ORBITER FUSELAGE

## DEPENDENT VARIABLE CP

X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.2193	.5910	.1691	.1160	.1019	.7881		-.5139		-.2721	-.2354	-.1328	-.0265	.0424	.0809
20.000			.1845	.1079	.0845	.2441		-.5240		-.2791					
40.000			.2753	.1071	.0535	.0012		-.7937		-.3005	-.3746	-.0971	-.0153	.0494	.0925
55.000			.3357	.1364	.0504	-.0467		-.4093		-.4010					
70.000			.3673	.1441	.0368	-.0276		-.2860		-.4968	-.8239	-.1254	.0287	.0649	
90.000		.5607	.4076	.1800	.0457	.0044		-.2235		-.4953	-.7994	-.1965	.0364	.0552	
120.000			.4561	.2806	.1581	.1671		.0447		-.5075	-.7948	-.3496	.0250	.0378	
140.000										-.5806					
150.000			.4664	.3380	.2601	.2806				-.8589	-.9679	-.2243	.0312	.0327	
151.000									.1819						
156.000								.5411							
162.000									.2530						
165.000										-.9079	-.8775	-.1587	.0277	.0323	
169.000								.6496							
174.000							.8053								
180.000	1.2193	.6834	.4435	.3528	.2986	.3299		.6338		-.9435	-1.0102	-.1101	.0273	.0296	
305.000			.3112	.1460	.0919	-.0566		-.4900		-.2602					
320.000			.2501	.1007	.0981	.0076		-.7701		-.2660	-.3688	-.1155	-.0203	.0396	.0859
340.000			.2293	.0980	.1180	.2516		-.5543		-.2497					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.0906	.1170	.1873	-.0909	-.3030	-.3098	-.2529		-.2258	-.2266					
40.000	.0566	.0717	.0779	-.2233	-.3065	-.2823	-.2560		-.2258	-.2254					
70.000	-.0526	-.1160	-.0127	.0690	-.2513	-.4554	-.2263								
90.000	-.0190	-.0555	.0567	.0899	-.3180	-.4349	-.3101								
105.000			.1187	.1247	-.4383	-.4670	-.3770								
110.000								-.2633							
120.000	.0186	.0432	.1935	.1705	-.5201	-.4709	-.5389	-.2653							
135.000			.2769	.3884	-.3977	-.3167	-.4167								
150.000	.0352	.1029	.2959	.4790	-.2691	-.2800	-.3185								
165.000	.0375		.2956		-.0692	-.2433	-.2191								
180.000	.0379	.1145	.2997	.5287											
320.000	.0461	.1149	.1360	-.1596	-.3167	-.2595	-.2280								

ORIGINAL PAGE IS  
OF POOR QUALITY

ARC11-019 IAB1 LVAP(ELHL UNSEALED) ORB. FUSELAGE

(RET807)

ALPHA ( 2 ) = -4.038 BETA0 ( 4 ) = 4.117

SECTION ( 1 ) ORBITER FUSELAGE		DEPENDENT VARIABLE CP													
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
20.000	1.1874	.5535	.1391	.0842	.0646	.7558		-.5404		-.3252	-.2600	-.1907	-.0769	.0014	.0404
40.000			.1181	.0460	.0296	.1246		-.5402		-.3423					
55.000			.1502	.0141	-.0221	-.1150		-.5464		-.3544	-.3291	-.1446	-.0535	.0208	.0529
70.000			.1772	.0009	-.0618	-.1453		-.5359		-.5142					
90.000		.3383	.2050	-.0038	-.0901	-.1223		-.4102		-.6351	-.5011	-.3287	.0119	.0605	
120.000			.2478	.0250	-.0909	-.1086		-.3462		-.6347	-.5175	-.4711	.0096	.0527	
140.000			.3239	.1457	.0203	.0450		-.1081		-.6965	-.7698	-.4302	-.0527	.0197	
150.000										-.9237					
151.000			.3814	.2699	.1836	.2077			.0471	-.9620	-.9831	-.1303	-.0325	-.0005	
156.000								.4305							
162.000									.1454						
165.000										-.8929	-.9921	-.0858	-.0286	.0014	
169.000								.5831							
174.000						.7557									
180.000	1.1874	.6404	.4326	.3353	.2768	.3063		.6018		-1.0784	-.8712	-.1022	-.0181	.0018	
305.000			.4540	.2556	.1793	.0191		-.3329		-.2471					
320.000			.3019	.1339	.1112	.0498		-.5906		-.2654	-.5093	-.1081	-.0103	.0463	.1207
340.000			.2279	.0923	.0959	.2922		-.5033		-.2740					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
200.000	.0704	.1525	.2762	.0300	-.3068	-.3002	-.3022		-.2556	-.2372					
40.000	.0848	.1731	.3093	.0230	-.2955	-.2808	-.2780		-.2720	-.2644					
70.000	-.0453	-.1060	-.0587	.0133	-.3322	-.5280	-.2757								
90.000	-.0153	-.0527	.0059	.0258	-.4027	-.5253	-.3330								
105.000			.0647	.0331	-.5423	-.5428	-.4220								
110.000								-.2469							
120.000	.0065	.0118	.1126	.0206	-.6795	-.6396	-.6864	-.2660							
135.000			.2117	.3072	-.5292	-.5191	-.5309								
150.000	.0143	.0745	.2443	.4737	-.3847	-.4711	-.4176								
165.000	.0111		.2548		-.1651	-.4017	-.2364								
180.000	.0147	.0951	.2758	.4881											
320.000	.0322	.0819	.0825	-.4612	-.3544	-.2952	-.2882								

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## 1A81A - PRESSURE SOURCE DATA TABULATION

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ARC11-019 1A81 LVAP(ELHL UNSEALD) ORB. FUSELAGE

(RET807)

ALPHA0 ( 2 ) = -4.037 BETA0 ( 5 ) = 6.169

SECTION ( 1 ) ORBITER FUSELAGE		DEPENDENT VARIABLE CP													
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.1614	.5448	.1291	.0705	.0430	.6774		-.4929		-.3906	-.3017	-.2590	-.1155	-.0461	.0021
20.000			.0880	.0147	-.0008	.0641		-.4635		-.4053					
40.000			.0896	-.0263	-.0561	-.1708		-.5400		-.3948	-.3203	-.1801	-.0860	.0028	.0455
55.000			.1078	-.0542	-.1064	-.1817		-.5823		-.5419					
70.000			.1334	-.0627	-.1347	-.1579		-.4472		-.6724	-.4423	-.4209	-.0408	.0633	
90.000		.2302	.1777	-.0391	-.1455	-.1508		-.3820		-.6875	-.5040	-.5358	-.0883	.0524	
120.000			.2574	.0836	-.0455	-.0009		-.1701		-.7630	-.5891	-.4939	-.1302	.0183	
140.000										-.9895					
150.000			.3261	.2280	.1349	.1651				-.9898	-.9848	-.1884	-.0914	-.0223	
151.000									-.0210						
156.000								.3653							
162.000									.0924						
165.000										-.8850	-.9976	-.1294	-.0717	-.0238	
169.000								.5438							
174.000						.7134									
180.000	1.1614	.5949	.4035	.3109	.2496	.2848		.5656		-1.0928	-.8660	-.1193	-.0542	-.0254	
305.000			.5306	.3225	.2351	.0703		-.2271		-.1937					
320.000			.3411	.1564	.1279	.0703		-.6076		-.2415	-.6656	-.1054	-.0147	.0506	.1281
340.000			.2358	.0922	.0856	.3048		-.4530		-.2741					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.0389	.1428	.2834	.0372	-.3242	-.3106	-.3130		-.2673	-.2409					
40.000	.0913	.2005	.3481	.0941	-.3169	-.2940	-.2978		-.2921	-.2753					
70.000	-.0366	-.0947	-.0696	-.0093	-.3541	-.5497	-.3002								
90.000	-.0130	-.0529	-.0139	.0027	-.4259	-.5497	-.3564								
105.000			.0442	.0302	-.5625	-.5749	-.4356								
110.000								-.2459							
120.000	.0018	.0089	.0840	-.0208	-.7371	-.7106	-.7447	-.2695							
135.000			.1762	.2726	-.5773	-.5981	-.6020								
150.000	-.0025	.0577	.2133	.4480	-.4352	-.5585	-.4810								
165.000	-.0064		.2354		-.2004	-.4542	-.2501								
180.000	-.0068	.0786	.2633	.4438											
320.000	.0289	.0949	.1003	-.4554	-.3739	-.3013	-.2959								

ARC11-019 IAB1 LVAP(ELHL UNSEALD) ORB. FUSELAGE

(RETB07)

ALPHA0(3) = -2.013 BETA0(1) = -6.133

SECTION (1) ORBITER FUSELAGE				DEPENDENT VARIABLE CP											
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.1812	.5944	.1628	.0959	.0819	.7773		-.4494		-.3032	-.2871	-.1719	-.0698	.0632	.1227
20.000			.2341	.1354	.0971	.3351		-.4547		-.2740					
40.000			.4338	.1997	.1316	.0883		-.5747		-.3581	-.3920	-.1157	-.0196	.0900	.1538
55.000			.5542	.3240	.2136	.0879		-.1915		-.2296					
70.000			.5895	.3484	.2183	.1162		-.0941		-.2089	-.6842	-.1255	.0129	.0690	
90.000		.8084	.6057	.3728	.2292	.1578		-.0289		-.1984	-.6659	-.1881	.0099	.0593	
120.000			.5772	.3921	.2698	.2775		.2204		-.2354	-.6132	-.5973	-.0344	-.0080	
140.000										-.2548					
150.000			.4730	.3182	.2612	.2912				-.3368	-1.0554	-.3501	-.0064	-.0212	
151.000									.3170						
156.000								.6401							
162.000									.3447						
165.000										-.9293	-.9251	-.2602	-.0200	-.0240	
169.000								.6610							
174.000						.8172									
180.000	1.1812	.6225	.3423	.2591	.2182	.2575		.5123		-1.0906	-.9049	-.1947	-.0344	-.0274	
305.000			.0792	-.0335	-.0533	-.1872		-.6877		-.3329					
320.000			.1219	.0019	.0101	-.1566		-.5101		-.3302	-.3516	-.1870	-.0819	.0017	.0680
340.000			.1800	.0450	.0711	.1189		-.4197		-.3178					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1398	.2490	.4720	.0495	-.3219	-.2764	-.2833			-.2418	-.2338				
40.000	.0672	.0776	.1593	-.2736	-.4530	-.2756	-.2514			-.2250	-.2220				
70.000	-.1299	-.2367	.0219	.1395	-.1397	-.3032	-.1350								
90.000	-.0949	-.1862	.0580	.1897	-.1832	-.2818	-.1513								
105.000			.1347	.2492	-.2882	-.3102	-.1854								
110.000															
120.000	-.0961	-.0397	.2576	.3111	-.3324	-.2740	-.2211	-.2262							
135.000			.3208	.3227	-.2585	-.1703	-.2087								
150.000	-.0497	.0471	.3110	.2727	-.1639	-.1136	-.2094								
165.000	-.0408		.2760		.0943	-.0600	-.2324								
180.000	-.0341	.0568	.2391	.3514											
320.000	.1380	.2828	.3989	.1060	-.3114	-.2953	-.2468								

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## IABIA - PRESSURE SOURCE DATA TABULATION

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ARC11-019 IAB1 LVAP(ELHL UNSEALED) ORB. FUSELAGE

(RETB07)

ALPHA0( 3) = -2.004 BETA0( 2) = -2.060

## SECTION ( 1) ORBITER FUSELAGE

## DEPENDENT VARIABLE CP

X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.2200	.6201	.1813	.1103	.1020	.7776		-.5592		-.2526	-.2524	-.1431	-.0362	.0626	.1032
20.000			.2158	.1241	.0963	.2831		-.5239		-.2580					
40.000			.3451	.1418	.0836	.0349		-.6988		-.2903	-.3934	-.1169	-.0166	.0695	.1263
55.000			.4195	.1936	.1043	-.0042		-.3324		-.2661					
70.000			.4442	.2078	.0916	.0168		-.2170		-.3712	-.7863	-.2021	.0160	.0630	
90.000		.6436	.4732	.2362	.1032	.0568		-.1489		-.3850	-.7431	-.2715	.0229	.0549	
120.000			.4881	.3026	.1861	.2066		.1164		-.4065	-.7138	-.4297	.0457	.0330	
140.000										-.4720					
150.000			.4501	.3068	.2385	.2780				-.8286	-1.0072	-.3633	.0564	.0241	
151.000									.2421						
156.000								.5844							
162.000									.2925						
165.000										-.9230	-.8785	-.2738	.0472	.0218	
169.000							.8242	.6547							
174.000															
180.000	1.2200	.6362	.3823	.2945	.2443	.2877		.5963		-1.0227	-1.0261	-.2873	.0392	.0184	
305.000			.2362	.0790	.0411	-.0931		-.5758		-.2736					
320.000			.2174	.0763	.0725	-.0263		-.7138		-.2655	-.3325	-.1667	-.0304	.0426	.0852
340.000			.2250	.0851	.1016	.2206		-.5856		-.2682					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9690	1.0140	1.0450					
PHI															
.000	.1175	.1876	.3368	-.0507	-.3161	-.2699	-.2760		-.2222	-.2204					
40.000	.0760	.0773	.0783	-.4006	-.3476	-.2507	-.2398		-.2211	-.2219					
70.000	-.1138	-.2046	-.0350	.0915	-.2256	-.4324	-.1829								
90.000	-.0681	-.1315	.0437	.1238	-.2919	-.4078	-.2337								
105.000			.1156	.1607	-.4055	-.4374	-.3079								
110.000								-.2643							
120.000	-.0246	.0011	.2131	.2571	-.4635	-.4355	-.4071	-.2327							
135.000			.2680	.3779	-.3548	-.3033	-.3405								
150.000	.0069	.0726	.2749	.4374	-.2388	-.2460	-.2897								
165.000	.0100		.2703		-.0410	-.2075	-.2312								
180.000	.0134	.0814	.2669	.4804											
320.000	.0984	.2174	.3172	.0100	-.2910	-.2433	-.2208								

## ARC11-019 1A81 LVAP(ELHL UNSEALD) ORB. FUSELAGE

(RETB07)

ALPHA0 ( 3 ) = -1.969 BETA0 ( 3 ) = 2.058

SECTION ( 1 ) ORBITER FUSELAGE		DEPENDENT VARIABLE CP													
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.2098	.6111	.1698	.1017	.0858	.7874		-.5451		-.2577	-.2305	-.1547	-.0432	.0387	.0833
20.000			.1662	.0829	.0561	.1910		-.5659		-.2797					
40.000			.2249	.0648	.0163	-.0531		-.8310		-.3076	-.3348	-.1341	-.0220	.0488	.0888
55.000			.2572	.0644	-.0149	-.0990		-.4646		-.4207					
70.000			.2789	.0621	-.0419	-.0793		-.3383		-.5357	-.8324	-.1953	.0100	.0491	
90.000		.4314	.3120	.0886	-.0381	-.0543		-.2714		-.5469	-.8274	-.3461	.0359	.0399	
120.000			.3624	.1883	.0664	.1026		-.0168		-.5964	-.8688	-.4560	.0244	.0279	
140.000										-.7950					
150.000			.3806	.2665	.1812	.2200				-.9469	-1.0102	-.2455	.0244	.0162	
151.000									.1126						
156.000								.4801							
162.000									.1920						
165.000										-.9256	-.9695	-.1866	.0264	.0146	
169.000								.6103							
174.000							.7742								
180.000	1.2098	.6076	.3837	.3004	.2408	.2844		.6099		-1.0319	-.9838	-.1835	.0271	.0166	
305.000			.3888	.2012	.1369	-.0172		-.3951		-.2518					
320.000			.2950	.1279	.1116	.0327		-.5760		-.2498	-.3936	-.1272	-.0065	.0571	.1212
340.000			.2480	.0993	.1057	.2750		-.5237		-.2413					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1015	.1409	.2131	-.0317	-.2830	-.2894	-.2932		-.2505	-.2270					
40.000	.0984	.1525	.2513	-.0255	-.2811	-.2666	-.2600		-.2627	-.2608					
70.000	-.0974	-.1706	-.0599	.0268	-.2938	-.4988	-.2480								
90.000	-.0592	-.1037	.0096	.0465	-.3624	-.4938	-.3280								
105.000			.0760	.0790	-.4850	-.5228	-.3967								
110.000								-.2586							
120.000	-.0174	-.0004	.1444	.0990	-.5904	-.5682	-.6105	-.2524							
135.000			.2303	.3357	-.4891	-.4539	-.4932								
150.000	.0054	.0625	.2531	.4471	-.3601	-.4099	-.3685								
165.000	.0058		.2574		-.1410	-.3631	-.2245								
180.000	.0054	.0799	.2640	.4934											
320.000	.0635	.0888	.0701	-.3223	-.3234	-.2855	-.2818								

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## 1A81A - PRESSURE SOURCE DATA TABULATION

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ARC11-019 1A81 LVAP(ELHL UNSEALD) ORB. FUSELAGE

(RETB07)

ALPHA( 3) = -1.958 BETA( 4) = 6.150

SECTION ( 1) ORBITER FUSELAGE				DEPENDENT VARIABLE CP											
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.1602	.5727	.1349	.0653	.0351	.6718		-.4852		-.3747	-.2898	-.2614	-.1051	-.0270	.0222
20.000			.0938	.0091	-.0141	.0588		-.4300		-.3820					
40.000			.0903	-.0331	-.0734	-.1801		-.4967		-.3646	-.3255	-.1856	-.0761	.0097	.0597
55.000			.1021	-.0675	-.1288	-.1926		-.5839		-.4740					
70.000			.1219	-.0760	-.1622	-.1670		-.4424		-.6381	-.4459	-.4094	-.0452	.0485	
90.000		.2112	.1617	-.0532	-.1680	-.1525		-.3762		-.6754	-.5158	-.5229	-.0583	.0508	
120.000			.2292	.0594	-.0644	-.0057		-.1603		-.7586	-.5726	-.5310	-.0940	.0210	
140.000										-1.0026					
150.000			.2825	.1891	.0940	.1387				-1.0333	-1.0275	-.2517	-.0681	-.0185	
151.000									-.0297						
156.000								.3602							
162.000									.0770						
165.000										-.9145	-1.0395	-.1705	-.0534	-.0266	
169.000								.5296							
174.000							.6890								
180.000	1.1602	.5428	.3496	.2599	.2019	.2495		.5482		-1.1117	-.9020	-.1895	-.0383	-.0301	
305.000			.5399	.3262	.2429	.0776		-.1859		-.1695					
320.000			.3602	.1661	.1358	.0737		-.5043		-.2184	-.6075	-.1028	-.0065	.0651	.1468
340.000			.2429	.0921	.0854	.3031		-.4177		-.2930					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.0655	.1566	.2925	.0450	-.3207	-.3017	-.3038		-.2529	-.2258					
40.000	.1232	.2202	.3609	.1077	-.3188	-.2854	-.2891		-.2769	-.2647					
70.000	-.0773	-.1413	-.0951	-.0259	-.3552	-.5566	-.2786								
90.000	-.0437	-.0863	-.0294	-.0120	-.4279	-.5563	-.3356								
105.000			.0263	.0217	-.5579	-.5876	-.3914								
110.000								-.2440							
120.000	-.0200	-.0123	.0747	.0225	-.7120	-.7077	-.7376	-.2584							
135.000			.1607	.2671	-.5783	-.6066	-.6104								
150.000	-.0162	.0418	.2026	.3944	-.4509	-.5771	-.4590								
165.000	-.0228		.2204		-.2227	-.4810	-.2417								
180.000	-.0328	.0538	.2498	.4025											
320.000	.0520	.1103	.1096	-.4329	-.3610	-.3065	-.2968								

ORIGINAL

ORIGINAL PAGE IS  
OF POOR QUALITY



ARC11-C19 IAB1 LVAP(ELHL UNSEALD) ORB. FUSELAGE

(RETB07)

ALPHA0(4) = .059 BETA0(1) = -6.145

SECTION (1) ORBITER FUSELAGE		DEPENDENT VARIABLE CP													
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.1768	.6219	.1732	.0899	.0748	.7715		-.4498		-.2846	-.2669	-.1497	-.0600	.0753	.1414
20.000			.2510	.1361	.0947	.3343		-.3779		-.2617					
40.000			.4552	.2088	.1340	.0924		-.5200		-.2870	-.3570	-.0953	-.0073	.1055	.1793
55.000			.5674	.3324	.2223	.0897		-.1679		-.1945					
70.000			.5883	.3468	.2196	.1200		-.0755		-.1820	-.6319	-.1552	-.0092	.0544	
90.000		.7887	.5903	.3612	.2168	.1568		-.0176		-.1676	-.6517	-.2265	-.0127	.0474	
120.000			.5381	.3542	.2356	.2485		.2188		-.2323	-.6097	-.6842	-.0767	-.0495	
140.000										-.2972					
150.000			.4236	.2601	.2067	.2540				-.3651	-1.0829	-.4476	.0059	-.0372	
151.000									.3077						
156.000								.6299							
162.000									.3286						
165.000										-.9523	-1.0028	-.3984	.0047	-.0368	
169.000								.6435							
174.000							.7991								
180.000	1.1768	.5667	.2925	.2091	.1675	.2164		.4847		-1.1081	-.9231	-.2602	-.0073	-.0360	
305.000			.0698	-.0520	-.0736	-.1990		-.6931		-.3084					
320.000			.1229	-.0089	-.0027	-.1708		-.4479		-.3088	-.3329	-.1971	-.0751	.0116	.0891
340.000			.1843	.0378	.0603	.1137		-.3989		-.2964					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1607	.2656	.4754	.0584	-.3303	-.2892	-.2871			-.2358	-.2232				
40.000	.0941	.1066	.1782	-.2740	-.4421	-.2815	-.2468			-.2225	-.2156				
70.000	-.1774	-.3183	-.0671	.1285	-.1349	-.2791	-.1278								
90.000	-.1368	-.2547	.0188	.1816	-.1798	-.2640	-.1476								
105.000			.1028	.2284	-.2753	-.3008	-.1758								
110.000								-.2590							
120.000	-.1636	-.1101	.2471	.2494	-.3361	-.2685	-.2016	-.2133							
135.000			.3113	.2653	-.2857	-.1824	-.2032								
150.000	-.0892	.0099	.2958	.2208	-.1985	-.1294	-.2152								
165.000	-.0736		.2552		.0758	-.0708	-.2346								
180.000	-.0593	.0320	.2199	.2982											
320.000	.1679	.2943	.4078	.1116	-.3144	-.2952	-.2420								

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## 1A81A - PRESSURE SOURCE DATA TABULATION

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ARC11-019 1A81 LVAP(ELHL UNSEALED) ORB. FUSELAGE

(RETB07)

ALPHA0( 4) = .063 BETA0( 2) = -4.101

## SECTION ( 1) ORBITER FUSELAGE

## DEPENDENT VARIABLE CP

X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.2024	.6364	.1883	.0992	.0908	.7722		-.4518		-.2295	-.2439	-.1322	-.0412	.0750	.1375
20.000			.2451	.1285	.0950	.3146		-.3967		-.2284					
40.000			.4092	.1751	.1127	.0697		-.5240		-.2715	-.3687	-.1071	-.0082	.0996	.1630
55.000			.4985	.2606	.1646	.0445		-.2338		-.2086					
70.000			.5165	.2698	.1511	.0737		-.1287		-.2017	-.7009	-.1826	-.0070	.0578	
90.000		.7122	.5224	.2879	.1600	.1113		-.0652		-.2028	-.6889	-.2650	-.0039	.0497	
120.000			.5013	.3141	.2001	.2340		.1864		-.3019	-.6404	-.6487	-.0247	-.0052	
140.000										-.3737					
150.000			.4182	.2652	.2087	.2619				-.6456	-1.0530	-.4242	.0374	-.0076	
151.000									.2904						
156.000								.6150							
162.000									.3251						
165.000										-.9483	-.8086	-.3784	.0501	-.0049	
169.000								.6543							
174.000							.8171								
180.000	1.2024	.5807	.3152	.2380	.1901	.2457		.5534		-1.0815	-.9128	-.2934	.0332	-.0064	
305.000			.1566	.0124	-.0211	-.1424		-.6150		-.2787					
320.000			.1762	.0378	.0340	-.0823		-.4298		-.2768	-.3036	-.1892	-.0451	.0394	.0921
340.000			.2101	.0674	.0810	.1783		-.3989		-.2768					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1630	.2604	.4537	.0537	-.3309	-.2838	-.2950		-.2311	-.2300					
40.000	.0987	.1091	.1582	-.3298	-.4217	-.2661	-.2537		-.2239	-.2114					
70.000	-.1704	-.3026	-.0800	.0994	-.1951	-.3502	-.1564								
90.000	-.1233	-.2335	.0104	.1393	-.2539	-.3034	-.1734								
105.000			.0986	.1716	-.3640	-.3072	-.1881								
110.000								-.2655							
120.000	-.1094	-.0834	.2244	.1999	-.4423	-.3239	-.2467	-.2182							
135.000			.2895	.2692	-.3778	-.2383	-.2440								
150.000	-.0476	.0285	.2841	.2326	-.2542	-.1977	-.2405								
165.000	-.0380		.2591		.0091	-.1649	-.2351								
180.000	-.0303	.0447	.2346	.3592											
320.000	.1521	.2740	.3851	.0638	-.3018	-.2834	-.2328								

ARC11-019 IA81 LVAP(ELHL UNSEALD) ORB. FUSELAGE

(RET807)

ALPHA0( 4) = .066 BETA0 ( 3) = -.005

SECTION ( 1) ORBITER FUSELAGE				DEPENDENT VARIABLE CP											
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.2168	.6413	.1843	.0996	.0863	.7814		-.4918		-.2273	-.2047	-.1209	-.0232	.0682	.1062
20.000			.2031	.0969	.0678	.2375		-.4652		-.2351					
40.000			.2956	.0996	.0447	-.0127		-.6121		-.2676	-.3399	-.1259	-.0077	.0706	.1213
55.000			.3381	.1201	.0373	-.0634		-.3923		-.2622					
70.000			.3518	.1209	.0103	-.0361		-.2760		-.3009	-.7817	-.1882	-.0031	.0389	
90.000		.5161	.3758	.1425	.0169	-.0014		-.2066		-.3857	-.8072	-.2719	.0097	.0347	
120.000			.3963	.2140	.0943	.1436		.0516		-.5081	-.7484	-.3909	.0428	.0216	
140.000										-.5941					
150.000			.3782	.2433	.1743	.2290				-.9166	-1.0255	-.3538	.0551	.0103	
151.000									.1711						
156.000								.5215							
162.000									.2292						
165.000										-.9541	-.9396	-.2182	.0393	.0122	
169.000								.6172							
174.000							.7797								
180.000	1.2168	.5744	.3424	.2565	.2066	.2648		.5936		-1.0192	-1.0662	-.1862	.0366	.0118	
305.000			.3137	.1350	.0779	-.0630		-.4706		-.2671					
320.000			.2623	.1025	.0861	-.0010		-.5476		-.2539	-.3175	-.1445	-.0024	.0563	.1101
340.000			.2387	.0925	.0939	.2477		-.4783		-.7295					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1190	.1431	.1835	-.0811	-.3192	-.2857	-.2563		-.2181	-.2215					
40.000	.0988	.1076	.1008	-.1680	-.3269	-.2668	-.2509		-.2162	-.2135					
70.000	-.1638	-.2741	-.0869	.0501	-.2740	-.4772	-.1940								
90.000	-.1072	-.1895	-.0047	.0744	-.3466	-.4722	-.2485								
105.000			.0645	.1134	-.4649	-.5127	-.2389								
110.000								-.2510							
120.000	-.0512	-.0456	.1367	.2249	-.5146	-.5287	-.3102	-.2305							
135.000			.2156	.3981	-.4108	-.4014	-.4106								
150.000	-.0192	.0320	.2384	.4309	-.3243	-.3538	-.3256								
165.000	-.0145		.2430		-.1263	-.3193	-.2070								
180.000	-.0114	.0529	.2457	.4576											
320.000	.0971	.1429	.1585	-.1209	-.3131	-.2563	-.2375								

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## 1A81A - PRESSURE SOURCE DATA TABULATION

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ARC11-019 1A81 LVAP(ELHL UNSEALD) ORB, FUSELAGE

(RETB07)

ALPHA( 4) = .078 BETA( 4) = 4.088

SECTION ( 1) ORBITER FUSELAGE		DEPENDENT VARIABLE CP													
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.1871	.6094	.1622	.0805	.0543	.7555		-.4756		-.2799	-.2349	-.1804	-.0602	.0261	.0791
20.000			.1377	.0403	.0157	.1269		-.4239		-.2891					
40.000			.1582	.0087	-.0400	-.1237		-.3826		-.2826	-.3007	-.1409	-.0447	.0365	.0842
55.000			.1717	-.0153	-.0871	-.1556		-.5111		-.2575					
70.000			.1878	-.0226	-.1173	-.1265		-.3830		-.3884	-.8458	-.2552	-.0184	.0342	
90.000		.3049	.2213	-.0014	-.1180	-.1023		-.3097		-.5808	-.7071	-.4080	.0171	.0311	
120.000			.2702	.0978	-.0150	.0401		-.0720		-.6672	-.9004	-.4632	.0087	.0183	
140.000										-.9157					
150.000			.3006	.1939	.1136	.1583				-1.0237	-1.0446	-.2646	.0152	.0015	
151.000									.0465						
156.000								.4241							
162.000									.1296						
165.000										-.9564	-1.0589	-.2236	.0114	-.0008	
169.000								.5638							
174.000							.7348								
180.000	1.1871	.5369	.3333	.2464	.1873	.2410		.5734		-1.0980	-.5268	-.2348	.0222	-.0082	
305.000			.4666	.2703	.1873	.0354		-.2387		-.1869					
320.000			.3391	.1505	.1257	.0612		-.4657		-.2120	-.4122	-.1027	.0098	.0706	.1587
340.000			.2580	.0922	.0938	.2987		-.3830		-.2430					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1081	.1798	.2980	.0382	-.3238	-.3148	-.3026		-.2356	-.2113					
40.000	.1375	.2092	.3335	.0467	-.3071	-.2777	-.2686		-.2573	-.2508					
70.000	-.1345	-.2131	-.1051	-.0086	-.3338	-.5321	-.2528								
90.000	-.0905	-.1470	-.0333	.0123	-.4060	-.5332	-.3181								
105.000			.0316	.0371	-.5327	-.5746	-.3796								
110.000								-.2131							
120.000	-.0402	-.0391	.0968	.0686	-.6488	-.6417	-.6757	-.2267							
135.000			.1801	.3119	-.5471	-.5420	-.5526								
150.000	-.0228	.0327	.2029	.4351	-.4157	-.5091	-.4159								
165.000	-.0286		.2118		-.2089	-.4461	-.2360								
180.000	-.0321	.0447	.2327	.3937											
320.000	.0766	.1111	.1086	-.4547	-.3573	-.2937	-.2820								

ARC11-019 IAB1 LVAP(ELHL UNSEALED) ORB. FUSELAGE

(RETB07)

ALPHA0 ( 4 ) = .082 BETA0 ( 5 ) = 6.135

SECTION ( 1 ) ORBITER FUSELAGE		DEPENDENT VARIABLE CP													
X/LB		.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970 .5740
PHI															
.000	1.1557	.5957	.1456	.0625	.0277	.6614			-.4377		-.3483	-.2753	-.2306	-.0928	-.0134 .0369
20.000			.1014	.0025	-.0242	.0520			-.4306		-.3471				
40.000			.0955	-.0432	-.0854	-.1960			-.4368		-.3118	-.3192	-.1697	-.0731	.0206 .0733
55.000			.0994	-.0839	-.1389	-.2073			-.5703		-.3063				
70.000			.1116	-.0936	-.1738	-.1733			-.4411		-.4372	-.6047	-.3460	-.0405	.0384
90.000		.1858	.1471	-.0730	-.1815	-.1526			-.3673		-.6457	-.5130	-.5043	-.0309	.0400
120.000			.2036	.0319	-.0931	-.0141			-.1499		-.7523	-.5658	-.5163	-.0510	.0195
140.000											-1.0047				
150.000			.2501	.1458	.0598	.1169					-1.0599	-1.0560	-.2926	-.0347	-.0209
151.000										-.0369					
156.000									.3521						
162.000										.0675					
165.000											-.9371	-1.0653	-.2175	-.0239	-.0279
169.000								.6594	.5190						
174.000															
180.000	1.1557	.4927	.3065	.2147	.1592	.2206			.5272		-1.1263	-.9263	-.2585	-.0154	-.0349
305.000			.5507	.3348	.2503	.0872			-.1406		-.1444				
320.000			.3774	.1779	.1420	.0809			-.3855		-.1906	-.4664	-.0940	.0078	.0788 .1668
340.000			.2585	.0954	.0798	.3058			-.3467		-.2508				
X/LB		.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450				
PHI															
.000	.0838	.1734	.3013	.0483	-.3299	-.3086	-.3060			-.2388	-.2129				
40.000	.1493	.2393	.3653	.1150	-.3288	-.2710	-.2816			-.2598	-.2564				
70.000	-.1229	-.1888	-.1245	-.0307	-.3636	-.5508	-.2668								
90.000	-.0787	-.1295	-.0551	-.0164	-.4376	-.5551	-.3239								
105.000			.0053	.0216	-.5640	-.5969	-.3821								
110.000									-.2160						
120.000	-.0426	-.0408	.0568	.0645	-.6926	-.7068	-.7212		-.2323						
135.000			.1452	.2742	-.5740	-.6117	-.6160								
150.000	-.0337	.0235	.1870	.3234	-.4593	-.5896	-.4453								
165.000	-.0442		.2076		-.2431	-.5089	-.2455								
180.000	-.0566	.0355	.2324	.3447											
320.000	.0749	.1266	.1281	-.4469	-.3578	-.3161	-.2905								

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## 1A81A - PRESSURE SOURCE DATA TABULATION

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ARC11-019 1A81 LVAP(ELHL UNSEALD) ORB. FUSELAGE

(RETB07)

ALPHA0 ( 5 ) = 2.177 BETA0 ( 1 ) = -6.133

## SECTION ( 1 ) ORBITER FUSELAGE

## DEPENDENT VARIABLE CP

X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.1715	.6530	.1899	.0992	.0803	.7697		-.4381		-.2715	-.2435	-.1375	-.0569	.0884	.1622
20.000			.2741	.1488	.1031	.3345		-.3561		-.2528					
40.000			.4811	.2350	.1552	.0981		-.4678		-.2477	-.2486	-.0890	.0010	.1194	.2026
55.000			.5787	.3480	.2332	.0953		-.1439		-.1703					
70.000			.5929	.3496	.2127	.1131		-.0639		-.1703	-.5797	-.1682	-.0307	.0442	
90.000		.7786	.5799	.3511	.2050	.1464		-.0065		-.1633	-.6418	-.2470	-.0403	.0291	
120.000			.5090	.3223	.1926	.2166		.2170		-.2308	-.6147	-.6761	-.1519	-.0961	
140.000										-.3112					
150.000			.3768	.2203	.1586	.2123				-.3827	-1.1108	-.4992	-.0423	-.0411	
151.000									.2922						
156.000								.6166							
162.000									.3082						
165.000										-.9696	-1.0359	-.4915	-.0205	-.0364	
169.000								.6259							
174.000						.7783									
180.000	1.1715	.5208	.2367	.1683	.1235	.1805		.4626		-1.1142	-.9514	-.4285	.0004	-.0249	
305.000			.0703	-.0543	-.0817	-.2103		-.6071		-.2911					
320.000			.1350	-.0015	-.0066	-.1786		-.4151		-.2922	-.3078	-.2033	-.0659	.0325	.1106
340.000			.2003	.0429	.0590	.1049		-.3754		-.2745					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1830	.2795	.4845	.0685	-.3225	-.2767	-.2760		-.2297	-.2160					
40.000	.1218	.1319	.2009	-.2708	-.4256	-.2721	-.2425		-.2202	-.2149					
70.000	-.2066	-.4223	-.1042	.1191	-.1188	-.3022	-.1183								
90.000	-.1724	-.3586	-.0115	.1646	-.1566	-.2829	-.1395								
105.000			.0855	.2086	-.2532	-.3057	-.1699								
110.000								-.2551							
120.000	-.2261	-.1850	.2432	.1918	-.3404	-.2806	-.1967	-.2184							
135.000			.2893	.2168	-.3126	-.1993	-.2106								
150.000	-.1176	-.0122	.2747	.1676	-.2300	-.1433	-.2184								
165.000	-.0917		.2318		.0632	-.0820	-.2311								
180.000	-.0739	.0220	.2017	.2380											
320.000	.1941	.3075	.4102	.1156	-.2960	-.2822	-.2230								

ARC11-019 IAB1 LVAP(ELHL UNSEALED) ORB. FUSELAGE

(RETB07)

ALPHA0( 5) = 2.184 BETA0 ( 2) = -2.056

SECTION ( 1) ORBITER FUSELAGE		DEPENDENT VARIABLE CP													
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.2094	.6729	.2045	.1076	.0912	.7714		-.4426		-.2042	-.1890	-.1109	-.0157	.0816	.1301
20.000			.2429	.1244	.0881	.2797		-.3761		-.2046					
40.000			.3658	.1543	.0874	.0368		-.4844		-.2030	-.3010	-.1062	-.0027	.0897	.1627
55.000			.4237	.2019	.1023	-.0077		-.3023		-.2399					
70.000			.4292	.1942	.0770	.0137		-.1998		-.2499	-.7229	-.1976	-.0284	.0339	
90.000		.6002	.4358	.2068	.0774	.0490		-.1264		-.2719	-.7449	-.2881	-.0234	.0297	
120.000			.4178	.2356	.1201	.1660		.1263		-.3884	-.7010	-.4276	-.0430	-.0068	
140.000										-.4843					
150.000			.3536	.2176	.1534	.2145				-.8643	-1.0887	-.4641	-.0018	.0077	
151.000									.2199						
156.000								.5642							
162.000									.2626						
165.000										-.9751	-.9388	-.4349	.0297	.0138	
169.000								.6221							
174.000							.7950								
180.000	1.2094	.5314	.2836	.2067	.1569	.2219		.5607		-1.0945	-1.0748	-.3035	.0193	.0138	
305.000			.2374	.0724	.0295	-.1061		-.4391		-.2633					
320.000			.2371	.0732	.0670	-.0406		-.3107		-.2355	-.2727	-.1606	-.0153	.0587	.1124
340.000			.2440	.0820	.0942	.2133		-.4145		-.2159					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1458	.2025	.3272	-.0396	-.3188	-.2761	-.2740		-.2211	-.2195					
40.000	.1151	.1110	.0949	-.3881	-.3464	-.2661	-.2460		-.2124	-.2128					
70.000	-.1983	-.3760	-.1236	.0513	-.2371	-.4036	-.1684								
90.000	-.1536	-.2922	-.0254	.0690	-.3015	-.3732	-.1826								
105.000			.0761	.0951	-.4104	-.3844	-.1961								
110.000								-.2428							
120.000	-.1198	-.1105	.1804	.1042	-.5030	-.3989	-.3139	-.2131							
135.000			.2286	.2875	-.4454	-.2929	-.2901								
150.000	-.0599	-.0021	.2113	.3443	-.3272	-.2779	-.2739								
165.000	-.0445		.1983		-.0995	-.2575	-.2201								
180.000	-.0368	.0225	.1979	.4118											
320.000	.1441	.2383	.3322	.0179	-.2953	-.2433	-.2131								

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## 1A81A - PRESSURE SOURCE DATA TABULATION

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ARC11-019 1A81 LVAP(ELHL UNSEALD) ORB. FUSELAGE

(RETB07)

ALPHA0( 5) = 2.185 BETA0( 3) = 2.047

SECTION ( 1) ORBITER FUSELAGE			DEPENDENT VARIABLE CP													
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740	
PHI																
.000	1.2003	.6581	.1956	.1047	.0818	.7821		-.4405		-.2126	-.1833	-.1272	-.0285	.0647	.1098	
20.000			.1928	.0817	.0534	.1835		-.4100		-.2245						
40.000			.2460	.0686	.0154	-.0647		-.2765		-.2241	-.2793	-.1410	-.0143	.0693	.1168	
55.000			.2644	.0578	-.0198	-.1113		-.3962		-.2502						
70.000			.2672	.0459	-.0555	-.0860		-.3173		-.3097	-.7951	-.2010	-.0197	.0252		
90.000		.3993	.2883	.0590	-.0551	-.0526		-.2476		-.3731	-.8259	-.2449	-.0004	.0271		
120.000			.3106	.1328	.0219	.0845		.0052		-.5708	-.7997	-.4232	.0263	.0179		
140.000										-.7343						
150.000			.3032	.1819	.1101	.1713				-.9942	-1.0456	-.4236	.0466	.0129		
151.000									.1088							
156.000								.4697								
162.000									.1744							
165.000										-.9869	-1.0102	-.3068	.0290	.0117		
169.000								.5828								
174.000							.7496									
180.000	1.2003	.5048	.2918	.2125	.1582	.2209		.5744		-1.1102	-1.0286	-.3014	.0221	.0082		
305.000			.3959	.2068	.1373	-.0100		-.2776		-.2068						
320.000			.3253	.1427	.1175	.0423		-.4334		-.2118	-.3061	-.1146	.0183	.0775	.1553	
340.000			.2730	.1075	.1027	.2798		-.3693		-.2222						
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450						
PHI																
.000	.1314	.1686	.2292	-.0089	-.3008	-.2979	-.2936		-.2297	-.2126						
40.000	.1418	.1905	.2769	-.0070	-.2942	-.2668	-.2558		-.2372	-.2414						
70.000	-.1965	-.3071	-.1338	.0122	-.3089	-.5071	-.2150									
90.000	-.1382	-.2296	-.0507	.0329	-.3827	-.5075	-.2489									
105.000			.0185	.0659	-.5085	-.5574	-.2955									
110.000								-.2319								
120.000	-.0721	-.0811	.0765	.1824	-.5612	-.5947	-.5212	-.2142								
135.000			.1741	.3448	-.4695	-.4865	-.5158									
150.000	-.0399	.0077	.2014	.3648	-.3873	-.4607	-.3798									
165.000	-.0387		.2002		-.1847	-.4129	-.2250									
180.000	-.0418	.0219	.1998	.4244												
320.000	.1087	.1161	.0912	-.3181	-.3259	-.2843	-.2715									

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OF POOR QUALITY



ARC11-019 IA81 LVAP(ELHL UNSEALED) ORB. FUSELAGE

(RETB07)

ALPHA0( 5) = 2.186 BETA0( 4) = 6.135

SECTION ( 1) ORBITER FUSELAGE		DEPENDENT VARIABLE CP													
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.1462	.6168	.1658	.0562	.0289	.6440		-.4265		-.3296	-.2741	-.2379	-.0995	-.0042	.0436
20.000			.1159	-.0011	-.0232	.0391		-.4400		-.3262					
40.000			.0974	-.0500	-.0887	-.2095		-.4233		-.2894	-.3150	-.1837	-.0770	.0263	.0813
55.000			.0955	-.0934	-.1489	-.2244		-.5631		-.2882					
70.000			.1049	-.1085	-.1909	-.1754		-.4529		-.3625	-.8470	-.3029	-.0557	.0251	
90.000		.1583	.1324	-.0926	-.1909	-.1489		-.3731		-.6204	-.5268	-.4544	-.0254	.0248	
120.000			.1756	.0012	-.1132	-.0201		-.1476		-.7498	-.6258	-.5025	-.0281	.0209	
140.000										-1.0170					
150.000			.2067	.1024	.0160	.0959				-1.0998	-1.0906	-.3493	-.0100	-.0204	
151.000									-.0458						
156.000								.3403							
162.000									.0529						
165.000										-1.0116	-1.1018	-.2911	-.0092	-.0316	
169.000								.4972							
174.000							.6363								
180.000	1.1462	.4283	.2523	.1734	.1057	.1921		.5000		-1.1543	-.9614	-.4117	-.0034	-.0406	
305.000			.5615	.3492	.2552	.0944		-.1118		-.1252					
320.000			.3966	.1935	.1460	.0842		-.3052		-.1730	-.4305	-.0914	.0194	.0844	.1760
340.000			.2733	.1040	.0771	.3046		-.3076		-.2493					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.0867	.1811	.3073	.0517	-.3244	-.2980	-.3100		-.2504	-.2165					
40.000	.1624	.2482	.3597	.1173	-.3360	-.2668	-.2859		-.2638	-.2653					
70.000	-.1698	-.2453	-.1632	-.0485	-.3786	-.5551	-.2643								
90.000	-.1129	-.1770	-.0910	-.0281	-.4537	-.5601	-.3146								
105.000			-.0274	.0228	-.5787	-.6071	-.3512								
110.000															
120.000	-.0612	-.0715	.0339	.0948	-.6756	-.7132	-.6911	-.2167							
135.000			.1242	.3189	-.5666	-.6340	-.6189	-.2268							
150.000	-.0497	-.0034	.1589	.2965	-.4650	-.6169	-.4377								
165.000	-.0628		.1859		-.2737	-.5411	-.2465								
180.000	-.0767	.0110	.2087	.2744											
320.000	.0950	.1370	.1447	-.4475	-.3484	-.3096	-.2882								

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## IA81A - PRESSURE SOURCE DATA TABULATION

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ARC11-019 IA81 LVAP(ELHL UNSEALED) ORB. FUSELAGE

(RETB07)

ALPHA0( 6) = 4.257 BETA0 ( 1) = -6.123

SECTION ( 11) ORBITER FUSELAGE		DEPENDENT VARIABLE CP													
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.1640	.6762	.2105	.1011	.0856	.7733		-.4239		-.2434	-.2359	-.1356	-.0502	.1007	.1663
20.000			.2973	.1572	.1075	.3388		-.3363		-.2322					
40.000			.5048	.2483	.1678	.1040		-.4252		-.2130	-.2174	-.0755	.0102	.1349	.2129
55.000			.5955	.3559	.2411	.1025		-.1182		-.1388					
70.000			.5920	.3486	.2108	.1151		-.0508		-.1392	-.5527	-.1722	-.0498	.0420	
90.000		.7650	.5635	.3363	.1943	.1430		.0038		-.1311	-.6359	-.2459	-.0656	.0266	
120.000			.4719	.2775	.1588	.1920		.2158		-.2325	-.6220	-.6400	-.2280	-.1278	
140.000										-.3231					
150.000			.3247	.1642	.1133	.1838				-.4148	-.9289	-.5392	-.1312	-.0493	
151.000									.2955						
156.000								.6129							
162.000									.3055						
165.000										-1.0051	-.7252	-.5338	-.1247	-.0381	
169.000								.6164							
174.000						.7659									
180.000	1.1640	.4662	.1893	.1255	.0822	.1566		.4525		-1.1389	-.8727	-.5150	-.0675	-.0231	
305.000			.0672	-.0576	-.0845	-.2142		-.5380		-.2814					
320.000			.1422	.0000	-.0068	-.1777		-.3914		-.2818	-.2962	-.2105	-.0571	.0347	.1178
340.000			.2095	.0488	.0624	.1112		-.3495		-.2656					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1859	.2803	.4770	.0718	-.3363	-.2907	-.2792		-.2340	-.2170					
40.000	.1320	.1395	.2060	-.2695	-.4286	-.2888	-.2453		-.2223	-.2109					
70.000	-.2352	-.4888	-.1352	.1052	-.1187	-.3571	-.1309								
90.000	-.2004	-.4161	-.0576	.1566	-.1510	-.3103	-.1517								
105.000			.0462	.1735	-.2441	-.3253	-.1709								
110.000								-.2508							
120.000	-.2854	-.2590	.2041	.1274	-.3437	-.3131	-.1962	-.2120							
135.000			.2369	.1366	-.3733	-.2341	-.2208								
150.000	-.1439	-.0261	.2303	.0935	-.2730	-.1733	-.2277								
165.000	-.1142		.1923		.0385	-.1109	-.2308								
180.000	-.0973	-.0119	.1708	.1943											
320.000	.2068	.3064	.4108	.1055	-.3041	-.2953	-.2239								

ARC11-019 IAB1 LVAP(ELHL UNSEALED) ORB. FUSELAGE

(RETB07)

ALPHA0( 6) = 4.260 BETA0( 2) = -4.081

## SECTION ( 1) ORBITER FUSELAGE

## DEPENDENT VARIABLE CP

X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.1883	.6851	.2168	.1109	.0908	.7749		-.4144		-.2128	-.1999	-.1064	-.0254	.0929	.1649
20.000			.2813	.1466	.1016	.3149		-.3335		-.2120					
40.000			.4461	.2081	.1334	.0697		-.4410		-.1993	-.2460	-.0841	.0106	.1201	.1990
55.000			.5140	.2810	.1733	.0403		-.1965		-.1729					
70.000			.5078	.2722	.1407	.0615		-.1158		-.1798	-.6294	-.1909	-.0507	.0358	
90.000		.6773	.4941	.2683	.1284	.0951		-.0532		-.1794	-.6889	-.2739	-.0619	.0251	
120.000			.4324	.2449	.1286	.1717		.1756		-.2964	-.6590	-.5221	-.1534	-.0707	
140.000										-.3910					
150.000			.3254	.1727	.1189	.1911				-.6009	-.8652	-.5179	-.0821	-.0185	
151.000									.2582						
156.000								.5892							
162.000									.2801						
165.000										-.9995	-.7024	-.5213	-.0676	-.0059	
167.000								.6172							
174.000							.7824								
180.000	1.1883	.4752	.2168	.1484	.1065	.1795		.5020		-1.1279	-.8598	-.4546	-.0251	.0050	
305.000			.1555	.0092	-.0225	-.1598		-.4787		-.2691					
320.000			.1950	.0456	.0422	-.0948		-.3271		-.2468	-.2604	-.1773	-.0343	.0598	.1219
340.000			.2342	.0751	.0856	.1686		-.3064		-.2341					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1933	.2766	.4625	-.0652	-.3282	-.2830	-.2845		-.2311	-.2168					
40.000	.1365	.1470	.1899	-.3319	-.4072	-.2750	-.2392		-.2141	-.1998					
70.000	-.2303	-.4858	-.1406	.0767	-.1578	-.3819	-.1505								
90.000	-.1895	-.3930	-.0466	.0924	-.2023	-.3409	-.1927								
105.000			.0622	.1016	-.2959	-.3585	-.1943								
112.000								-.2375							
120.000	-.2136	-.2007	.1907	.0881	-.4060	-.3610	-.2528	-.2075							
135.000			.2230	.1691	-.4248	-.2811	-.2589								
150.000	-.1055	-.0309	.2103	.1511	-.3163	-.2277	-.2459								
165.000	-.0883		.1851		-.0450	-.1866	-.2282								
180.000	-.0718	-.0125	.1560	.3283											
320.000	.1957	.2946	.3934	.0716	-.3014	-.2799	-.2117								

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## IAB1A - PRESSURE SOURCE DATA TABULATION

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ARC11-019 IAB1 LVAP(ELHL UNSEALED) ORB. FUSELAGE

(RETB07)

ALPHA0( 6) = 4.257 BETA0( 3) = -.003

SECTION ( 1) ORBITER FUSELAGE

DEPENDENT VARIABLE CP

X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.2039	.6941	.2181	.1140	.0883	.7818		-.4576		-.1926	-.1641	-.0967	-.0039	.0894	.1352
20.000			.2349	.1140	.0737	.2324		-.3400		-.1999					
40.000			.3242	.1247	.0561	-.0215		-.4585		-.2049	-.2626	-.1221	.0050	.0936	.1528
55.000			.3508	.1335	.0423	-.0731		-.3258		-.2345					
70.000			.3395	.1171	.0032	-.0467		-.2410		-.2740	-.7435	-.2353	-.0445	.0226	
90.000		.4843	.3461	.1236	-.0029	-.0118		-.1662		-.3104	-.7824	-.2740	-.0376	.0215	
120.000			.3344	.1569	.0459	.1091		.0748		-.4630	-.7527	-.4198	-.0545	-.0019	
140.000															
150.000			.2897	.1573	.0959	.1692									
151.000									.1622						
156.000								.5164							
162.000									.2071						
165.000										-1.0044	-.8885	-.4719	.0119	.0206	
169.000							.7508	.5954							
174.000															
180.000	1.2039	.4682	.2420	.1669	.1207	.2006		.5636		-1.1417	-.9747	-.3779	-.0100	.0176	
305.000			.3246	.1443	.0897	-.0634		-.3070		-.2268					
320.000			.3015	.1255	.1041	.0010		-.2985		-.2206	-.2445	-.1351	.0069	.0810	.1429
340.000			.2762	.1075	.1010	.2448		-.3971		-.2029					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1498	.1632	.1860	-.0898	-.3274	-.2871	-.2477		-.2103	-.2020					
40.000	.1371	.1413	.1258	-.1405	-.3412	-.2740	-.2415		-.2016	-.1971					
70.000	-.2292	-.4244	-.1643	.0191	-.2499	-.4466	-.1904								
90.000	-.1780	-.3448	-.0668	.0345	-.3354	-.4183	-.2561								
105.000			.0222	.0498	-.4463	-.4482	-.3626								
110.000								-.2342							
120.000	-.1227	-.1382	.0874	.1505	-.5356	-.4830	-.3753	-.2104							
135.000			.1457	.3143	-.4697	-.4107	-.3396								
150.000	-.0670	-.0319	.1645	.3849	-.3554	-.3757	-.2938								
165.000	-.0566		.1722		-.1655	-.3384	-.2077								
180.000	-.0554	-.0047	.1734	.3768											
320.000	.1352	.1711	.1753	-.0938	-.3228	-.2623	-.2304								

ARC11-019 IAB1 LVAP(ELHL UNSEALD) ORB. FUSELAGE

(RET907)

ALPHA( 6) = 4.257 BETA( 4) = 4.093

## SECTION ( 1) ORBITER FUSELAGE

## DEPENDENT VARIABLE CP

X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.1713	.6634	.1905	.0924	.0586	.7416		-.4177		-.2467	-.2046	-.1673	-.0454	.0496	.1056
20.000			.1653	.0550	.0211	.1163		-.3556		-.2475					
40.000			.1779	.0196	-.0283	-.1360		-.2892		-.2347	-.2716	-.1735	-.0303	.0627	.1164
55.000			.1751	-.0117	-.0881	-.1797		-.3915		-.2621					
70.000			.1767	-.0294	-.1309	-.1401		-.3560		-.3259	-.8214	-.1901	-.0319	.0117	
90.000		.2646	.1968	-.0151	-.1305	-.1042		-.2946		-.4089	-.8733	-.2537	-.0049	.0125	
120.000			.2204	.0512	-.0585	.0202		-.0523		-.6470	-.8659	-.4320	.0098	.0121	
140.000										-.8990					
150.000			.2208	.1117	.0345	.1130				-1.0728	-.9791	-.4455	.0214	.0075	
151.000									.0303						
156.000								.4079							
162.000									.0994						
165.000										-1.0213	-.9093	-.3409	.0063	.0052	
169.000								.5318							
174.000							.6913								
180.000	1.1713	.4262	.2334	.1570	.1047	.1785		.5372		-1.1572	-.9492	-.4227	.0156	-.0025	
305.000			.4960	.2913	.2122	.0432		-.1415		-.1446					
320.000			.3824	.1829	.1456	.0662		-.3290		-.1764	-.2347	-.0747	.0314	.1048	.1920
340.000			.2867	.1122	.0976	.2939		-.2988		-.2236					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1357	.2062	.3176	.0536	-.2974	-.2889	-.2879		-.2221	-.1906					
40.000	.1785	.2336	.3450	.0570	-.3048	-.2460	-.2527		-.2343	-.2290					
70.000	-.2168	-.3550	-.1759	-.0379	-.3503	-.5401	-.2129								
90.000	-.1621	-.2661	-.0965	-.0159	-.4318	-.5478	-.2450								
105.000			-.0305	.0165	-.5557	-.6050	-.2411								
110.000								-.2244							
120.000	-.0891	-.1169	.0342	.1314	-.6185	-.6601	-.3513	-.2162							
135.000			.1292	.3067	-.5308	-.5569	-.5401								
150.000	-.0593	-.0178	.1462	.3935	-.4396	-.5345	-.3966								
165.000	-.0609		.1520		-.2611	-.4677	-.2193								
180.000	-.0698	-.0059	.1670	.3217											
320.000	.1200	.1503	.1431	-.4569	-.3356	-.2860	-.2669								

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## IAB1A - PRESSURE SOURCE DATA TABULATION

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ARC11-019 IAB1 LVAP(ELHL UNSEALD) ORB. FUSELAGE

(RETB07)

ALPHA0 ( 6 ) = 4.251 BETA0 ( 5 ) = 6.145

## SECTION ( 1 ) ORBITER FUSELAGE

## DEPENDENT VARIABLE CP

X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.1372	.6464	.1731	.0737	.0302	.6393		-.4145		-.3066	-.2519	-.2278	-.0905	.0067	.0588
20.000			.1185	.0113	-.0207	.0400		-.4044		-.3012					
40.000			.0996	-.0369	-.0840	-.2106		-.3565		-.2695	-.2979	-.1841	-.0574	.0410	.1046
55.000			.0870	-.0908	-.1522	-.2293		-.4839		-.2823					
70.000			.0949	-.1043	-.1924	-.1897		-.4329		-.3453	-.8486	-.2669	-.0466	.0151	
90.000		.1469	.1193	-.0912	-.1989	-.1558		-.3500		-.4303	-.7025	-.4252	-.0142	.0155	
120.000			.1519	-.0092	-.1254	-.0304		-.1226		-.7246	-.8189	-.4876	-.0207	.0163	
140.000										-.8976					
150.000			.0661	.0718	-.0125	.0717				-1.1026	-1.1119	-.3447	-.0084	-.0018	
151.000									-.0473						
156.000								.3425							
162.000									.0411						
165.000										-1.0246	-1.1068	-.3709	-.0038	-.0099	
169.000								.4942							
174.000							.6261								
180.000	1.1372	.3778	.2073	.1224	.0715	.1570		.4853		-1.1570	-.9522	-.5046	-.0338	-.0268	
305.000			.5788	.3582	.2727	.0997		-.0817		-.0975					
320.000			.4282	.2104	.1681	.0865		-.2749		-.1458	-.3399	-.0647	.0336	.1077	.1979
340.000			.2961	.1093	.0852	.3000		-.2927		-.2222					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1046	.1832	.3128	.0394	-.3116	-.2961	-.2937		-.2271	-.1934					
40.000	.1914	.2488	.3629	.1119	-.3251	-.2476	-.2679		-.2442	-.2389					
70.000	-.2019	-.3020	-.1822	-.0613	-.3740	-.5548	-.2312								
90.000	-.1511	-.2271	-.1071	-.0331	-.4518	-.5671	-.2652								
105.000			-.0374	.0228	-.5743	-.6207	-.3184								
110.000								-.2117							
120.000	-.0824	-.0886	.0231	.1104	-.6735	-.6962	-.6899	-.2105							
135.000			.0957	.3526	-.5702	-.6236	-.6084								
150.000	-.0658	-.0127	.1293	.3141	-.4762	-.6036	-.4265								
165.000	-.0774		.1562		-.3092	-.5357	-.2345								
180.000	-.0920	.0035	.1883	.1893											
320.000	.1125	.1610	.1582	-.4526	-.3339	-.3057	-.2751								

ORIGINAL PAGE IS  
OF POOR QUALITY

ARC11-019 IAB1 LVAP(ELHL UNSEALD) ORB. FUSELAGE

(RETB07)

ALPHA0 ( 7 ) = 6.353 BETA0 ( 1 ) = -4.069

## SECTION ( 1 ) ORBITER FUSELAGE

## DEPENDENT VARIABLE CP

X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.1798	.7159	.2390	.1227	.0980	.7774		-.4120		-.1904	-.1742	-.1006	-.0176	.0978	.1717
20.000			.3047	.1624	.1126	.3134		-.2950		-.1957					
40.000			.4726	.2347	.1479	.0699		-.4103		-.1850	-.2024	-.0702	.0216	.1250	.2033
55.000			.5309	.3009	.1858	.0342		-.1770		-.1581					
70.000			.5110	.2747	.1367	.0552		-.1052		-.1635	-.5976	-.1922	-.0677	.0256	
90.000		.6661	.4847	.2586	.1176	.0819		-.0435		-.1865	-.6854	-.2641	-.0843	.0049	
120.000			.3986	.2132	.0941	.1447		.1736		-.2962	-.6792	-.5698	-.2192	-.1229	
140.000										-.4013					
150.000			.2785	.1266	.0754	.1579				-.5682	-.7196	-.5313	-.1693	-.0306	
151.000									.2493						
156.000								.5800							
162.000									.2678						
165.000										-1.0116	-.6800	-.5682	-.1628	-.0191	
169.000								.6009							
174.000							.7670								
180.000	1.1798	.4250	.1681	.1091	.0637	.1467		.4859		-.6941	-.7235	-.6079	-.1689	-.0037	
305.000			.1568	.0159	-.0180	-.1709		-.4411		-.2603					
320.000			.2147	.0631	.0524	-.1018		-.2891		-.2286	-.2423	-.1589	-.0277	.0653	.1274
340.000			.2566	.0857	.0913	.1657		-.2861		-.2124					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9500	.9990	1.0140	1.0450					
PHI															
.000	.1986	.2773	.4625	.0671	-.3427	-.2915	-.2847		-.2269	-.2212					
40.000	.1486	.1544	.1964	-.3539	-.4063	-.2838	-.2457		-.2144	-.2004					
70.000	-.2561	-.5211	-.1725	.0544	-.1613	-.4016	-.1570								
90.000	-.2139	-.4355	-.0793	.0598	-.1971	-.3617	-.2079								
105.000			.0447	.0728	-.2807	-.3821	-.2264								
110.000								-.2381							
120.000	-.2657	-.2545	.1440	.0556	-.3859	-.3754	-.2754	-.2105							
135.000			.1618	.1484	-.4339	-.3086	-.2874								
150.000	-.1252	-.0785	.1342	.1711	-.3379	-.2500	-.2512								
165.000	-.1079		.1150		-.0784	-.1993	-.2281								
180.000	-.0929	-.0516	.1043	.2874											
320.000	.1986	.2853	.3821	.0447	-.3049	-.2785	-.2089								

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## IABIA - PRESSURE SOURCE DATA TABULATION

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ARC11-019 IAB1 LVAP(ELHL UNSEALD) ORB. FUSELAGE

(RET807)

ALPHA0 ( 7 ) = 6.352 BETA0 ( 2 ) = -2.035

SECTION ( 1 ) ORBITER FUSELAGE		DEPENDENT VARIABLE CP													
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.1906	.7213	.2416	.1271	.1014	.7707		-.4372		-.1764	-.1566	-.0815	.0049	.0997	.1433
20.000			.2862	.1456	.0960	.2764		-.2732		-.1868					
40.000			.4097	.1860	.1102	.0280		-.4148		-.1864	-.2226	-.0869	.0149	.1132	.1838
55.000			.4485	.2215	.1179	-.0226		-.2404		-.1883					
70.000			.4316	.1964	.0702	.0022		-.1636		-.2176	-.6743	-.2145	-.0744	.0167	
90.000		.5682	.4116	.1876	.0541	.0340		-.1072		-.2322	-.7322	-.2415	-.0779	.0037	
120.000			.3564	.1706	.0622	.1178		.1259		-.3713	-.7194	-.4856	-.1700	-.0709	
140.000										-.4903					
150.000			.2678	.1259	.0696	.1562				-.8781	-.6898	-.5349	-.1604	-.0071	
151.000									.2026						
156.000								.5455							
162.000									.2334						
165.000										-1.0284	-.7002	-.5900	-.1538	.0033	
169.000								.5930							
174.000							.7655								
180.000	1.1906	.4225	.1871	.1256	.0781	.1620		.5235		-.7298	-.7433	-.6127	-.0770	.0168	
305.000			.2494	.0894	.0381	-.1239		-.3538		-.2377					
320.000			.2739	.1014	.0801	-.0529		-.2103		-.2068	-.2288	-.1268	.0006	.0731	.1345
340.000			.2758	.1064	.0991	.2027		-.3189		-.1894					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1665	.2230	.3440	-.0432	-.3321	-.2811	-.2737			-.2229	-.2115				
40.000	.1372	.1383	.1125	-.3679	-.3548	-.2719	-.2467			-.2164	-.2081				
70.000	-.2539	-.5059	-.1784	.0345	-.2019	-.4240	-.1946								
90.000	-.2065	-.4151	-.0867	.0353	-.2643	-.3891	-.3022								
105.000			.0270	.0479	-.3459	-.4171	-.4125								
110.000								-.2397							
120.000	-.1980	-.2065	.1025	.0199	-.4559	-.4125	-.3817	-.2031							
135.000			.1329	.2124	-.4590	-.3323	-.3424								
150.000	-.1034	-.0782	.1240	.2740	-.3622	-.2972	-.2820								
165.000	-.0861		.1167		-.1251	-.2721	-.2189								
180.000	-.0776	-.0435	.1137	.3145											
320.000	.1706	.2504	.3439	.0114	-.3011	-.2505	-.2116								



ARC11-019 IAB1 LVAP(ELHL UNSEALD) ORB. FUSELAGE

(RETB07)

ALPHA0( 7) = 6.347 BETA0 ( 3) = .010

SECTION ( 1) ORBITER FUSELAGE				DEPENDENT VARIABLE CP											
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.1956	.7264	.2406	.1321	.1021	.7875		-.4353		-.1770	-.1373	-.0775	.0107	.0939	.1428
20.000			.2594	.1348	.0868	.2313		-.3075		-.1832					
40.000			.3424	.1463	.0760	-.0214		-.3768		-.1913	-.2247	-.1003	.0096	.1016	.1647
55.000			.3604	.1482	.0530	-.0785		-.2694		-.2059					
70.000			.3440	.1244	.0053	-.0533		-.2151		-.2536	-.7227	-.2159	-.0716	.0081	
90.000		.4686	.3377	.1210	-.0093	-.0179		-.1520		-.2883	-.7728	-.2586	-.0766	.0034	
120.000			.3079	.1310	.0228	.0881		.0805		-.4471	-.7369	-.4240	-.1362	-.0250	
140.000										-.5801					
150.000			.2543	.1198	.0574	.1413				-.9443	-.7231	-.5218	-.1655	.0097	
151.000									.1533						
156.000								.5086							
162.000									.1921						
165.000										-1.0094	-.7130	-.5849	-.1620	.0213	
169.000								.5786							
174.000							.7368								
180.000	1.1956	.4169	.1990	.1290	.0803	.1708		-.5455		-.6911	-.7196	-.5914	-.1474	.0251	
305.000			.3409	.1602	.1001	-.0634		-.2686		-.2082					
320.000			.3288	.1444	.1176	.0061		-.2140		-.2001	-.2062	-.1074	.0200	.0935	.1578
340.000			.2977	.1267	.1141	.2445		-.3652		-.1881					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1624	.1739	.1847	-.0847	-.3163	-.2833	-.2584		-.2136	-.2128					
40.000	.1501	.1558	.1379	-.1303	-.3482	-.2660	-.2414		-.2117	-.2019					
70.000	-.2506	-.4828	-.1937	.0130	-.2379	-.4408	-.2218								
90.000	-.2010	-.3917	-.1161	.0157	-.3117	-.4128	-.3208								
105.000			-.0127	.0199	-.4089	-.4447	-.4245								
110.000								-.2318							
120.000	-.1491	-.1752	.0476	.0580	-.5108	-.4738	-.4257	-.2040							
135.000			.0979	.2475	-.4697	-.3971	-.3729								
150.000	-.0864	-.0700	.1141	.3079	-.3628	-.3625	-.3054								
165.000	-.0676		.1179		-.1541	-.3166	-.2125								
180.000	-.0664	-.0308	.1221	.3209											
320.000	.1501	.1821	.1813	-.0819	-.2956	-.2738	-.2252								

DATE 20 OCT 75

## IAQIA - PRESSURE SOURCE DATA TABULATION

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ARC11-019 IAB1 LVAP(ELHL UNSEALD) ORB. FUSELAGE

(RET807)

ALPHA0 (7) = 6.344 BETA0 (4) = 2.069

SECTION (1) ORBITER FUSELAGE		DEPENDENT VARIABLE CP													
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.1853	.7129	.2309	.1235	.0897	.7833		-.4194		-.1864	-.1446	-.1019	-.0174	.0791	.1287
20.000			.2293	.1020	.0605	.1784		-.3481		-.1999					
40.000			.2725	.0950	.0309	-.0759		-.2038		-.2030	-.2331	-.1193	-.0066	.0884	.1387
55.000			.2725	.0704	-.0110	-.1374		-.2987		-.2234					
70.000			.2611	.0442	-.0578	-.1004		-.2724		-.2796	-.7610	-.1953	-.0768	.0083	
90.000		.3640	.2607	.0488	-.0694	-.0638		-.2099		-.3382	-.8158	-.2176	-.0803	.0079	
120.000			.2568	.0866	-.0265	.0520		.0220		-.5280	-.7437	-.3430	-.0437	-.0044	
140.000										-.6830					
150.000			.2246	.1016	.0382	.1203				-1.0212	-.7020	-.5012	-.1587	.0153	
151.000									.0946						
156.000								.4558							
162.000									.1447						
165.000										-.9795	-.7132	-.5903	-.1568	.0226	
169.000								.5534							
174.000							.7191								
180.000	1.1853	.4017	.2003	.1259	.0752	.1596		.5380		-.6985	-.8042	-.5980	-.1545	.0157	
305.000			.4281	.2346	.1601	-.0125		-.1991		-.1716					
320.000			.3731	.1785	.1437	.0465		-.3886		-.1867	-.2030	-.0892	.0325	.1002	.1800
340.000			.3092	.1328	.1126	.2804		-.3135		-.1983					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1580	.1980	.2589	.0153	-.2987	-.3058	-.2996		-.2276	-.2112					
40.000	.1711	.2153	.2956	-.0086	-.3006	-.2543	-.2525		-.2295	-.2283					
70.000	-.2544	-.4464	-.2150	-.0217	-.2829	-.4567	-.2116								
90.000	-.1996	-.3617	-.1328	-.0205	-.3666	-.4386	-.2730								
105.000			-.0544	-.0043	-.4846	-.4840	-.4266								
110.000								-.2285							
120.000	-.1253	-.1652	-.0054	.0630	-.5659	-.5189	-.4393	-.2112							
135.000			.0912	.2697	-.4925	-.4405	-.3888								
150.000	-.0730	-.0587	.1300	.3113	-.3751	-.4209	-.3195								
165.000	-.0661		.1135		-.2004	-.3734	-.2143								
180.000	-.0764	-.0378	.1131	.3241											
320.000	.1380	.1455	.1166	-.3300	-.3347	-.3019	-.2786								

ORIGINAL PAGE IS  
OF POOR QUALITY

ARC11-019 IAB1 LVAP(ELHL UNSEALD) ORB. FUSELAGE

(RETB07)

ALPHA0( 7) = 6.340 BETA0 ( 5) = 4.114

SECTION ( 1) ORBITER FUSELAGE		DEPENDENT VARIABLE CP													
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.1614	.5885	.2064	.1033	.0591	.7370		-.4014		-.2309	-.1771	-.1487	-.0362	.0496	.1114
20.000			.1776	.0659	.0232	.1155		-.3395		-.2368					
40.000			.1942	.0366	-.0270	-.1375		-.2177		-.2302	-.2406	-.1406	-.0234	.0616	.1307
55.000			.1780	-.0031	-.0830	-.1846		-.3499		-.2600					
70.000			.1690	-.0251	-.1279	-.1502		-.3399		-.3154	-.8021	-.1763	-.0709	-.0002	
90.000		.2490	.1824	-.0170	-.1360	-.1138		-.2792		-.3909	-.8649	-.2024	-.0643	.0040	
120.000			.1906	.0362	-.0712	.0092		-.0388		-.6038	-.7486	-.3427	-.1154	.0060	
140.000										-.8530					
150.000			.1820	.0832	.0091	.0873				-1.0677	-.6931	-.5309	-.1386	.0180	
151.000									.0217						
156.000								.4007							
162.000									.0848						
165.000										-.9234	-.7226	-.5301	-.1537	.0130	
169.000								.5206							
174.000							.6600								
180.000	1.1614	.3817	.1906	.1113	.0621	.1467		.5198		-.7713	-.7536	-.5602	-.1579	-.0029	
305.000			.5099	.3014	.2207	.0401		-.1211		-.1264					
320.000			.4144	.2025	.1622	.0643		-.3278		-.1593	-.2085	-.0531	.0423	.1122	.2009
340.000			.3103	.1225	.1057	.2909		-.3200		-.2065					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1453	.2034	.3209	.0482	-.2939	-.3150	-.2974			-.2182	-.1901				
40.000	.1913	.2297	.3370	.0416	-.3020	-.2581	-.2476			-.2330	-.2216				
70.000	-.2449	-.4121	-.2205	-.0642	-.3301	-.5010	-.2148								
90.000	-.1916	-.3266	-.1365	-.0549	-.4096	-.4863	-.2380								
105.000			-.0672	-.0317	-.5373	-.5400	-.2847								
110.000								-.2350							
120.000	-.1092	-.1469	-.0244	.0688	-.6026	-.5886	-.4091	-.2222							
135.000			.0664	.2910	-.4863	-.5106	-.3592								
150.000	-.0751	-.0433	.0965	.2937	-.4182	-.4978	-.3352								
165.000	-.0806		.1000		-.2736	-.4534	-.2241								
180.000	-.0895	-.0367	.1081	.2814											
320.000	.1268	.1609	.1533	-.4571	-.3424	-.2947	-.2706								

1A81A - PRESSURE SOURCE DATA TABULATION

ARC11-019: 1A81 LVAP(ELHL UNSEALED) ORB. FUSELAGE

(RETB08) ( 17 OCT 75 )

## PARAMETRIC DATA

MACH	=	1.100	RN/FT	=	3.000
ELV-1B	=	8.000	ELV-0B	=	4.000
RUDDER	=	.000	SPOBRK	=	.000

ALPHA0 ( 1 ) = .064      BETA0 ( 1 ) = -6.230

SECTION ( 1 ) ORBITER FUSELAGE				DEPENDENT VARIABLE CP											
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.2733	.7621	.3437	.2538	.2610	.8773		-.4075		-.1727	-.1692	-.1907	-.2658	.0511	.1693
20.000			.4183	.2887	.2633	.5417		-.3806		-.2129					
40.000			.6118	.3561	.2885	.3234		-.3008		-.0707	.0110	-.0632	-.2188	-.0271	.2305
55.000			.7173	.4700	.3617	.2889		.0313		-.0879					
70.000			.7366	.4862	.3536	.3025		.1230		-.0105	-.3619	-.1482	-.1558	-.0885	
90.000		.9354	.7371	.4988	.3577	.3354		.1931		.0227	-.3842	-.2828	-.1975	-.0973	
120.000			.6848	.4935	.3765	.4258		.4288		.0090	-.3053	-.5453	-.2625	-.2078	
140.000										-.0404					
150.000			.5748	.4114	.3604	.4293				-.1692	-.6614	-.5165	-.2741	-.2509	
151.000									.5326						
156.000								.8082							
162.000									.5541						
165.000										-.5336	-.6154	-.4743	-.3047	-.2709	
169.000								.8236							
174.000							.9465								
180.000	1.2733	.7136	.4481	.3710	.3321	.4005		.6880		-.6470	-.5403	-.4378	-.3517	-.2497	
305.000			.2637	.1567	.1455	.0719		-.3611		-.4567					
320.000			.2697	.1870	.2090	.1045		-.7137		-.2064	.0000	-.1998	-.1709	-.0602	.0875
340.000			.3453	.2176	.2627	.3712		-.5143		-.0606					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.2280	.3828	.5934	.2530	-.3680	-.3124	-.3242		-.2473	-.2518					
40.000	.1429	.2010	.2954	-.1230	-.4718	-.3770	-.3604		-.2356	-.2396					
70.000	-.0519	-.1968	-.2546	.2300	.0490	-.1521	-.3404								
90.000	-.0304	-.1401	-.0282	.2416	.0212	-.1326	-.2612								
105.000			.1819	.2603	-.0642	-.1738	-.2640								
110.000								-.3302							
120.000	-.0640	-.0929	.3555	.2551	-.1076	-.1546	-.1700	-.3145							
135.000			.4043	.3521	-.1074	-.0508	-.1012								
150.000	.0500	.0353	.4026												

ARC11-019 IA81 LVAP(ELHL UNSEALED) ORB. FUSELAGE

(RETB08)

ALPHA0 ( 1 ) = .071 BETA0 ( 2 ) = -4.159

## SECTION ( 1 ) ORBITER FUSELAGE

## DEPENDENT VARIABLE CP

X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.2977	.7663	.3301	.2437	.2525	.8341		-.4160		-.0470	-.1457	-.1378	-.1321	-.0081	.1497
20.000			.3879	.2690	.2494	.5241		-.4031		-.0731					
40.000			.5570	.3159	.2499	.2933		-.3546		-.3880	-.0350	-.0930	-.1636	-.0546	.2031
55.000			.6496	.4029	.2961	.2462		-.0183		-.1555					
70.000			.6710	.4171	.2905	.2576		.0767		-.0693	-.4858	-.1921	-.1679	-.1039	
90.000		.8594	.6779	.4374	.2974	.2846		.1435		-.0426	-.4455	-.3017	-.2174	-.1153	
120.000			.6511	.4577	.3446	.3985		.3886		-.0604	-.3623	-.6107	-.2563	-.1928	
140.000										-.1170					
150.000			.5687	.4174	.3541	.4293				-.4103	-.6697	-.4804	-.2660	-.2020	
151.000									.4973						
156.000								.7863							
162.000									.5335						
165.000										-.5373	-.5953	-.4695	-.3063	-.1758	
169.000								.8211							
174.000							.9548								
180.000	1.2977	.7257	.4766	.3897	.3508	.4175		.7283		-.6448	-.5856	-.3936	-.3538	-.1483	
305.000			.3312	.1908	.1713	.0932		-.3147		-.4016					
320.000			.3233	.1984	.2218	.1576		-.6639		-.1615	.0000	-.1428	-.1438	-.0339	.0861
340.000			.3492	.2179	.2613	.4036		-.5420		-.0393					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.2336	.3732	.5715	.2398	-.3751	-.3105	-.3159		-.2482	-.2562					
40.000	.1497	.2046	.3051	-.1382	-.4340	-.3623	-.3386		-.2377	-.2357					
70.000	-.0265	-.1972	-.2116	.2128	.0199	-.1758	-.3581								
90.000	.0035	-.1440	.0339	.2174	-.0164	-.1576	-.2763								
105.000			.1982	.2288	-.1078	-.2056	-.2844								
110.000								-.3145							
120.000	-.0219	-.0493	.3447	.2345	-.1527	-.1992	-.2181	-.3198							
135.000			.4046	.3714	-.1314	-.0993	-.1451								
150.000	.0417	.1015	.4008	.3681	-.0359	-.0200	-.1197								
165.000	.0722		.3830		.2438	.0603	-.2809								
180.000	.0918	.1624	.3556	.4280											
320.000	.2402	.4181	.5411	.3191	-.3191	-.2699	-.2687								

DATE 20 OCT 75

## 1A81A - PRESSURE SOURCE DATA TABULATION

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ARC11-019 1A81 LVAP(ELHL UNSEALED) ORB. FUSELAGE

(RETB08)

ALPHA0 ( 1 ) = .075 BETA0 ( 3 ) = -.029

SECTION ( 1 ) ORBITER FUSELAGE	DEPENDENT VARIABLE CP														
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.3251	.7595	.2924	.2269	.2214	.8724		-.4207		-.0516	-.1036	-.1137	-.1051	-.0134	.1073
20.000			.3186	.2269	.1930	.4415		-.5227		-.0449					
40.000			.4363	.2342	.1719	.2197		-.4484		-.1707	-.1115	-.1333	-.1691	-.0368	.1520
55.000			.4968	.2780	.1780	.1563		-.1128		-.2644					
70.000			.5203	.2853	.1610	.1670		-.0175		-.1837	-.5869	-.2967	-.2420	-.1350	
90.000		.6747	.5428	.3097	.1668	.1916		.0517		-.1588	-.5510	-.4289	-.2501	-.1340	
120.000			.5581	.3766	.2546	.3261		.2906		-.2004	-.4619	-.7115	-.2302	-.1294	
140.000										-.2875					
150.000			.5422	.4033	.3309	.4015				-.5365	-.6707	-.4842	-.3325	-.1045	
151.000									.4080						
156.000								.7125							
162.000									.4620						
165.000										-.5426	-.5775	-.3844	-.3616	-.0984	
169.000								.7955							
174.000						.9263									
180.000	1.3251	.7253	.5037	.4124	.3622	.4374		.7739		-.6695	-.6539	-.3603	-.3637	-.0948	
305.000			.4748	.2852	.2336	.1598		-.2044		-.2625					
320.000			.3865	.2260	.2218	.2309		-.5075		-.0466	.0000	-.0860	-.0896	-.0235	.1182
340.000			.3506	.2105	.2330	.4549		-.4848		.0046					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1831	.2550	.3180	.1000	-.3702	-.3182	-.2918		-.2467	-.2485					
40.000	.1637	.2188	.2359	-.0243	-.4323	-.3248	-.2985		-.2475	-.2450					
70.000	-.0284	-.1795	.0209	.2004	-.0181	-.2003	-.3728								
90.000	.0100	-.1197	.1110	.1793	-.0646	-.1830	-.2918								
105.000			.1992	.1625	-.1607	-.2280	-.3046								
110.000								-.3507							
120.000	.0383	.0397	.2811	.2074	-.1866	-.2595	-.2942	-.3278							
135.000			.3245	.4015	-.0765	-.1617	-.2133								
150.000	.0688	.1761	.3384	.4335	-.0191	-.1096	-.1963								
165.000	.0739		.3509		.1697	-.0446	-.2820								
180.000	.0769	.1789	.3585	.5117											
320.000	.1736	.2661	.3232	.0640	-.3136	-.3290	-.2795								

ARC11-019 IAB1 LVAP(ELHL UNSEALD) ORB. FUSELAGE

(RET808)

ALPHA0( 1) = .094 BETA0( 4) = 4.123

SECTION ( 1) ORBITER FUSELAGE		DEPENDENT VARIABLE CP													
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.2937	.7449	.3007	.2228	.2146	.8410		-.5053		-.1203	-.1331	-.1506	-.1141	-.0775	.0860
20.000			.2810	.1933	.1859	.3651		-.5019		-.1147					
40.000			.3175	.1697	.1325	.1333		-.5757		-.1916	-.1369	-.1886	-.2069	-.0132	.1199
55.000			.3493	.1608	.0921	.0861		-.2314		-.3884					
70.000			.3721	.1580	.0611	.0896		-.1138		-.2911	-.6769	-.4214	-.3132	-.0823	
90.000		.4712	.4045	.1844	.0563	.1117		-.0410		-.2784	-.6512	-.6066	-.2708	-.0894	
120.000			.4485	.2754	.1518	.2510		.1745		-.3352	-.5781	-.7930	-.2955	-.1047	
140.000										-.5386					
150.000			.4704	.3545	.2732	.3479				-.6148	-.6499	-.4274	-.4221	-.1294	
151.000									.2930						
156.000								.6207							
162.000									.3714						
165.000										-.5518	-.6833	-.3890	-.3804	-.1429	
169.000								.7417							
174.000							.8870								
180.000	1.2937	.6849	.4949	.3997	.3450	.4133		.7506		-.6642	-.5661	-.3999	-.3306	-.1653	
305.000			.6217	.4033	.3345	.2430		-.0832		-.1522					
320.000			.4770	.2793	.2634	.2920		-.4034		-.0240	.0000	.0010	-.1809	.0797	.1748
340.000			.3941	.2328	.2393	.5134		-.5538		.0267					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1852	.2863	.3867	.1858	-.2805	-.2943	-.2932		-.2420	-.2455					
40.000	.2127	.3405	.4853	.2938	-.4775	-.2593	-.2853		-.2417	-.2460					
70.000	.0125	-.1273	.0717	.1941	-.0608	-.2445	-.4203								
90.000	.0567	-.0445	.1284	.1852	-.1145	-.2468	-.3449								
105.000			.2062	.1847	-.2080	-.2788	-.3559								
110.000								-.3432							
120.000	.0847	.0913	.2517	.0376	-.2814	-.3592	-.4041	-.3221							
135.000			.3169	.3226	-.2028	-.2751	-.3106								
150.000	.0977	.1612	.3387	.3867	-.1060	-.2361	-.3040								
165.000	.0946		.3438		.0744	-.1589	-.3071								
180.000	.0893	.1584	.3614	.4348											
320.000	.1655	.2342	.2404	-.2838	-.3055	-.3513	-.3353								

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## IA01A - PRESSURE SOURCE DATA TABULATION

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ARC11-019 IA01 LVAP(ELHL UNSEALD) ORB. FUSELAGE

(RET008)

ALPHA( 1) = .103 BETA( 5) = 6.207

SECTION ( 1) ORBITER FUSELAGE		DEPENDENT VARIABLE CP													
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.2583	.7293	.2970	.2117	.1925	.7984		-.4644		-.1516	-.3010	-.1689	-.1203	-.1501	.0429
20.000			.2509	.1657	.1600	.2983		-.5207		-.1897					
40.000			.2551	.1325	.1031	.0655		-.6249		-.2065	-.1876	-.2494	-.2369	-.0258	.1121
55.000			.2698	.1035	.0523	.0335		-.2756		-.4428					
70.000			.2903	.0972	.0167	.0469		-.1538		-.3388	-.7255	-.4750	-.3398	-.0294	
90.000		.3576	.3273	.1157	.0068	.0707		-.0803		-.3253	-.6972	-.6484	-.2986	-.0449	
120.000			.3775	.2139	.0920	.1986		.1157		-.3925	-.6269	-.8270	-.3615	-.0835	
140.000										-.6024					
150.000			.4107	.3119	.2234	.3124				-.6398	-.6827	-.4350	-.4515	-.1653	
151.000									.2236						
156.000								.5677							
162.000									.3249						
165.000										-.5675	-.6972	-.4086	-.3910	-.2034	
159.000								.7130							
174.000							.8148								
180.000	1.2583	.6367	.4602	.3690	.3142	.3938		.7191		-.6745	-.5545	-.4627	-.3404	-.2647	
305.000			.6960	.4642	.3897	.2782		-.0264		-.0009					
320.000			.5211	.3063	.2865	.3057		-.3467		-.0292	.0000	.0530	-.3514	.1134	.1874
340.000			.4043	.2296	.2370	.5208		-.5733		.0500					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1482	.2592	.3799	.1247	-.2745	-.3072	-.2974		-.2450	-.2374					
40.000	.2275	.3762	.5337	.3834	-.4521	-.2609	-.2928		-.2550	-.2497					
70.000	.0104	-.1094	.0626	.2001	-.0701	-.2515	-.4294								
90.000	.0524	-.0349	.1213	.2050	-.1270	-.2599	-.3554								
105.000			.1970	.2004	-.2154	-.2904	-.3655								
110.000								-.3362							
120.000	.0705	.0938	.2326	.0262	-.3138	-.3938	-.4408	-.3194							
135.000			.2634	.2890	-.2424	-.3205	-.3530								
150.000	.0799	.1441	.2815	.4066	-.1700	-.3119	-.3621								
165.000	.0692		.3072		.0394	-.2231	-.3130								
180.000	.0549	.1129	.3369	.4091											
320.000	.1557	.2386	.2294	-.2860	-.2980	-.3610	-.3868								

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ARC11-019 IA81 LVAP(ELHL UNSEALD) ORB. FUSELAGE

(RET808)

ALPHA0( 2) = 2.216 BETA0( 1) = -6.219

SECTION ( 1) ORBITER FUSELAGE		DEPENDENT VARIABLE CP													
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.2748	.7715	.3238	.2332	.2477	.8671		-.4358		-.1951	-.1630	-.1328	-.2127	.0633	.1955
20.000			.4086	.2794	.2518	.5385		-.3963		-.2436					
40.000			.6148	.3559	.2893	.3202		-.2988		-.3087	-.0017	-.0573	-.0151	-.0240	.2523
55.000			.7155	.4724	.3616	.2823		.0175		-.1023					
70.000			.7292	.4803	.3400	.2857		.1099		-.0218	-.3710	-.1366	-.1140	-.1197	
90.000		.9139	.7144	.4813	.3312	.3129		.1820		.0234	-.3967	-.2786	-.1886	-.1273	
120.000			.6454	.4506	.3305	.3778		.4191		-.0007	-.3334	-.5621	-.3504	-.2796	
140.000										-.0568					
150.000			.5230	.3554	.3036	.3814				-.1617	-.7000	-.5758	-.3062	-.2830	
151.000									.5153						
156.000								.7941							
162.000									.5345						
165.000										-.5670	-.6565	-.5116	-.3283	-.2546	
169.000								.8060							
174.000							.9214								
180.000	1.2748	.6671	.3934	.3134	.2782	.3532		.6657		-.6739	-.5853	-.4797	-.3783	-.1952	
305.000			.2330	.1278	.1335	.0353		-.3820		-.3956					
320.000			.2654	.1562	.2004	.0794		-.7346		-.1975	.0000	-.1627	-.1588	-.0284	.1233
340.000			.3250	.1881	.2503	.3524		-.5262		-.0687					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.2604	.4019	.6049	.2634	-.3489	-.2959	-.3031		-.2368	-.2346					
40.000	.1803	.2323	.3206	-.1103	-.4704	-.3634	-.3295		-.2191	-.2224					
70.000	-.0750	-.2144	-.2928	.1819	.0208	-.1840	-.3676								
90.000	-.0542	-.1720	-.1508	.1827	-.0086	-.1657	-.2929								
105.000			.1069	.2022	-.0910	-.2164	-.3033								
110.000										-.3023					
120.000	-.1050	-.1295	.3074	.2115	-.1350	-.2123	-.2110		-.3222						
135.000			.3506	.2855	-.1530	-.0987	-.1420								
150.000	.0445	.0256	.3537	.2848	-.0761	.0032	-.1148								
165.000	.0640		.3159		.2724	.1031	-.2784								
180.000	.0815	.1191	.2882	.3152											
320.000	.3016	.4666	.5947	.3844	-.3484	-.2812	-.2776								

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ARC11-019 IAB1 LVAP(ELHL UNSEALD) ORB. FUSELAGE

(RETB08)

ALPHA0( 2) = 2.214 BETA0( 2) = -2.090

SECTION ( 1) ORBITER FUSELAGE				DEPENDENT VARIABLE CP											
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.3268	.7673	.2699	.1987	.2072	.8030		-.4252		-.0476	-.0845	-.0868	-.0675	.0136	.1427
20.000			.3296	.2134	.1945	.4897		-.5317		-.0400					
40.000			.4866	.2616	.1961	.2541		-.3910		-.2663	-.0698	-.0753	-.0835	-.0395	.1934
55.000			.5654	.3318	.2207	.1938		-.0659		-.2164					
70.000			.5802	.3341	.2006	.1988		.0299		-.1272	-.5353	-.2230	-.1974	-.1391	
90.000		.7482	.5888	.3516	.2044	.2264		.0980		-.0964	-.4969	-.2837	-.2448	-.1407	
120.000			.5697	.3790	.2607	.3435		.3429		-.1292	-.4180	-.6660	-.2703	-.1834	
140.000										-.2014					
150.000			.5058	.3610	.2917	.3791				-.4883	-.7005	-.5212	-.2708	-.1144	
151.000									.4474						
156.000								.7456							
162.000									.4857						
165.000										-.5600	-.5861	-.4696	-.3315	-.0963	
169.000								.7960							
174.000						.9370									
180.000	1.3268	.6771	.4387	.3523	.3021	.3901		.7413		-.6797	-.6820	-.4051	-.3844	-.0882	
305.000			.3867	.2212	.1835	.0916		-.2652		-.2652					
320.000			.3303	.1834	.2012	.1681		-.5795		-.0792	.0000	-.0871	-.0708	-.0047	.1272
340.000			.3143	.1781	.2209	.4021		-.4633		-.0083					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.2155	.3103	.4588	.1445	-.3576	-.3019	-.2832		-.2372	-.2372					
40.000	.1749	.2141	.2356	-.2577	-.3340	-.3338	-.2946		-.2262	-.2227					
70.000	-.0451	-.2195	-.2627	.1617	-.0285	-.2149	-.3878								
90.000	-.0123	-.1712	-.0200	.1582	-.0761	-.2009	-.3060								
105.000			.1540	.1612	-.1628	-.2532	-.3139								
110.000								-.2888							
120.000	-.0047	-.0421	.2813	.1607	-.1981	-.2626	-.2789	-.3208							
135.000			.3409	.3217	-.1669	-.1687	-.2091								
150.000	.0633	.1088	.3444	.3115	-.0710	-.0984	-.1873								
165.000	.0760		.3200		.1765	-.0260	-.2779								
180.000	.0824	.1590	.3228	.4053											
320.000	.2286	.3683	.4758	.2486	-.3217	-.2654	-.2574								

## ARC11-019 IA81 LVAP(ELHL UNSEALD) ORB. FUSELAGE

(RETB08)

ALPHA0 ( 2 ) = 2.224 BETA0 ( 3 ) = 2.058

SECTION ( 1 ) ORBITER FUSELAGE				DEPENDENT VARIABLE CP											
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.3237	.7541	.2565	.1954	.1875	.8575		-.4631		-.0540	-.0825	-.1048	-.0917	-.0193	.1236
20.000			.2583	.1858	.1651	.3885		-.5106		-.0586					
40.000			.3612	.1832	.1285	.1539		-.5225		-.1480	-.1305	-.1395	-.1004	-.0109	.1554
55.000			.4130	.2094	.1142	.0835		-.1830		-.3202					
70.000			.4314	.2089	.0860	.0906		-.0767		-.2339	-.6278	-.3336	-.2672	-.1274	
90.000		.5652	.4577	.2310	.0824	.1155		.0004		-.2138	-.6033	-.4020	-.2735	-.1173	
120.000			.4761	.2956	.1639	.2525		.2358		-.2716	-.5381	-.7526	-.2517	-.1089	
140.000										-.4392					
150.000			.4611	.3317	.2481	.3337				-.6029	-.6993	-.4922	-.3652	-.0920	
151.000									.3408						
156.000								.6616							
162.000									.4024						
165.000										-.5739	-.6788	-.4152	-.4018	-.0932	
169.000								.7606							
174.000							.8995								
180.000	1.3237	.6632	.4456	.3534	.2976	.3791		.7528		-.7045	-.6842	-.4060	-.3670	-.0986	
305.000			.5403	.3224	.2704	.1890		-.1426		-.2106					
320.000			.4191	.2302	.2216	.2543		-.4499		-.0223	.0000	-.0312	.0026	.0304	.1633
340.000			.3388	.1911	.2106	.4826		-.5080		.0006					
X/LB	.5520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.2127	.2878	.3627	.1641	-.2840	-.2886	-.2689		-.2293	-.2226					
40.000	.2078	.3044	.4135	.1913	-.4777	-.2652	-.2681		-.2146	-.2311					
70.000	-.0400	-.1876	-.0821	.1699	-.0557	-.2392	-.4094								
90.000	-.0008	-.1211	.0457	.1590	-.1068	-.2280	-.3277								
105.000			.1527	.1476	-.2123	-.2782	-.3407								
110.000								-.2969							
120.000	.0539	.0345	.2468	.2140	-.2311	-.3234	-.3632	-.3346							
135.000			.3020	.3159	-.1591	-.2317	-.2842								
150.000	.0863	.1309	.3221	.3563	-.1041	-.1897	-.2742								
165.000	.0840		.3274		.0997	-.1292	-.2936								
180.000	.0776	.1555	.3280	.4120											
320.000	.1907	.2470	.2501	-.1574	-.3191	-.3447	-.2885								

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## IABIA - PRESSURE SOURCE DATA TABULATION

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ARC11-019 IAB1 LVAP(ELHL UNSEALD) ORB. FUSELAGE

(RETB08)

ALPHA0 (2) = 2.234 BETA0 (4) = 6.197

SECTION (1) ORBITER FUSELAGE		DEPENDENT VARIABLE CP													
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.2486	.7371	.2824	.1894	.1719	.7794		-.4811		-.1508	-.2232	-.1567	-.0976	-.1384	.0683
20.000			.2299	.1401	.1412	.2782		-.5479		-.2061					
40.000			.2322	.1080	.0871	.0370		-.6520		-.2161	-.1297	-.2100	-.2134	-.0050	.1315
55.000			.2451	.0788	.0388	-.0016		-.2987		-.4574					
70.000			.2677	.0686	-.0001	.0135		-.1739		-.3460	-.7300	-.4530	-.3292	-.0174	
90.000		.3222	.3045	.0905	-.0125	.0451		-.0928		-.3272	-.7060	-.5796	-.2913	-.0238	
120.000			.3444	.1797	.0550	.1828		.1105		-.3998	-.6455	-.8483	-.3154	-.0637	
140.000										-.6129					
150.000			.3640	.2611	.1705	.2777				-.6670	-.7090	-.4775	-.4743	-.1159	
151.000									.2123						
156.000								.5559							
162.000									.3089						
165.000										-.6006	-.7300	-.4490	-.4135	-.1704	
169.000								.6974							
174.000						.7943									
180.000	1.2486	.5784	.4055	.3124	.2523	.3483		.6956		-.7036	-.5942	-.5058	-.3662	-.2193	
305.000			.7011	.4648	.3891	.2723		-.0418		-.0533					
320.000			.5271	.3025	.2793	.2992		-.3483		-.0454	.0000	.0831	-.2943	.1178	.2026
340.000			.3987	.2110	.2183	.5136		-.6131		.0655					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1700	.2788	.3978	.1361	-.2667	-.2969	-.2895		-.2316	-.2362					
40.000	.2470	.4030	.5479	.3956	-.4513	-.2573	-.2872		-.2482	-.2507					
70.000	-.0073	-.1514	-.0433	.1717	-.0844	-.2583	-.4366								
90.000	.0459	-.0824	.0155	.1799	-.1442	-.2662	-.3757								
105.000			.0998	.1888	-.2361	-.3079	-.3866								
110.000								-.2976							
120.000	.0761	.0527	.1869	.2008	-.2944	-.3963	-.4397	-.3228							
135.000			.2519	.2955	-.2054	-.3280	-.3773								
150.000	.0929	.1347	.2503	.3205	-.1657	-.3234	-.3761								
165.000	.0901		.2626		-.0111	-.2372	-.3165								
180.000	.0792	.1139	.2941	.3263											
320.000	.1828	.2557	.2476	-.2809	-.2860	-.3512	-.3498								

ORIGINAL PAGE IS  
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ARC11-019 IAB1 LVAP(ELHL UNSEALED) ORB. FUSELAGE

(RET908)

ALPHA0 (3) = 4.330 BETA0 (1) = -4.129

SECTION (1) ORBITER FUSELAGE				DEPENDENT VARIABLE CP											
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.3113	.7679	.2517	.1823	.2159	.8108		.4648		-.0704	-.1179	-.1026	-.0127	.0403	.1737
20.000			.3381	.2254	.2197	.5249		-.5160		-.0645					
40.000			.5465	.3003	.2507	.2891		-.3341		-.4469	-.0010	-.0514	-.0162	-.0026	.2329
55.000			.6380	.3961	.2969	.2299		-.0360		-.1624					
70.000			.6461	.3953	.2601	.2253		.0533		-.0798	-.4833	-.1469	-.1394	-.1573	
90.000		.8189	.6346	.3933	.2466	.2474		.1309		-.0358	-.4471	-.2429	-.2099	-.1507	
120.000			.5768	.3742	.2463	.3232		.3733		-.0736	-.3955	-.6184	-.3644	-.2865	
140.000										-.1395					
150.000			.4720	.3067	.2455	.3389				-.4351	-.7286	-.5745	-.2949	-.1734	
151.000									.4747						
156.000								.7661							
162.000									.5009						
165.000										-.5955	-.6757	-.5445	-.3256	-.1361	
169.000								.7920							
174.000						.9249									
180.000	1.3113	.6312	.3663	.2839	.2363	.3299		.6910		-.7004	-.6502	-.4676	-.3860	-.1155	
305.000			.2768	.1525	.1455	.0367		-.3433		-.2696					
320.000			.2531	.1471	.1891	.1167		-.6722		-.1609	.0000	-.0992	-.0825	-.0009	.1140
340.000			.2793	.1575	.2245	.3645		-.5334		-.1049					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.2519	.3747	.5661	.2370	-.3520	-.2785	-.2649		-.2368	-.2378					
40.000	.1714	.2228	.3164	-.1540	-.4254	-.3440	-.2943		-.2183	-.2171					
70.000	-.0738	-.2770	-.3521	.1209	-.0393	-.2229	-.4050								
90.000	-.0446	-.2181	-.1485	.1023	-.0754	-.2074	-.3350								
105.000			.0983	.1275	-.1534	-.2678	-.3459								
110.000								-.2637							
120.000	-.1053	-.1233	.2686	.1232	-.1861	-.2839	-.2891	-.3295							
135.000			.3040	.2538	-.1940	-.1890	-.2207								
150.000	.0293	.0785	.2957	.2845	-.1285	-.0981	-.1856								
165.000	.0600		.3005		.1686	-.0058	-.2805								
180.000	.0826	.1293	.2814	.3757											
320.000	.2772	.4194	.5404	.3122	-.3305	-.2655	-.2527								

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## IAB1A - PRESSURE SOURCE DATA TABULATION

PAGE 95

ARC11-019 IAB1 LVAP(ELHL UNSEALD) ORB. FUSELAGE

(RET808)

ALPHA0( 3) = 4.329 BETA0 ( 2) = -.008

SECTION ( 1) ORBITER FUSELAGE

DEPENDENT VARIABLE CP

X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.3233	.7455	.2104	.1764	.1762	.7771		-.3072		-.0136	-.0653	-.0717	-.0457	.0333	.1515
20.000			.2453	.1835	.1544	.4017		-.4237		-.0288					
40.000			.4064	.2086	.1516	.1662		-.4476		-.0843	-.0839	-.1178	-.0576	.0009	.1848
55.000			.4805	.2633	.1653	.1088		-.1298		-.2659					
70.000			.4935	.2603	.1278	.1192		-.0304		-.1769	-.5345	-.2752	-.2268	-.1462	
90.000		.6395	.5037	.2732	.1163	.1502		.0411		-.1481	-.5505	-.3140	-.2815	-.1411	
120.000			.4920	.3037	.1698	.2715		.2885		-.2030	-.4932	-.7126	-.2883	-.1391	
140.000										-.2965					
150.000			.4468	.3029	.2195	.3168				-.5689	-.7393	-.5559	-.2870	-.0928	
151.000									.3884						
156.000								.6986							
162.000									.4336						
165.000										-.5915	-.6463	-.4555	-.3545	-.0824	
169.000								.7714							
174.000						.9004									
180.000	1.3233	.6324	.3992	.3104	.2480	.3507		.7445		-.7567	-.7164	-.4288	-.3842	-.0798	
305.000			.4475	.2683	.2218	.1202		-.2071		-.1936					
320.000			.3379	.1879	.1965	.1776		-.4888		.0225	.0000	-.0407	-.0183	.0098	.1592
340.000			.2737	.1671	.1939	.4089		-.3919		.0022					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.2267	.2883	.3405	.1172	-.2948	-.2757	-.2674		-.2252	-.2339					
40.000	.2008	.2563	.2771	.0067	-.3740	-.2935	-.2582		-.2057	-.2102					
70.000	-.0781	-.2608	-.2789	.1357	-.0607	-.2402	-.4247								
90.000	-.0397	-.1983	-.0126	.1230	-.1203	-.2282	-.3348								
105.000			.1499	.1162	-.2022	-.2922	-.3487								
110.000								-.3108							
120.000	-.0057	-.0331	.2436	.1265	-.2371	-.3104	-.3438	-.3184							
135.000			.2889	.3472	-.1884	-.2293	-.2713								
150.000	.0617	.1044	.3141	.3619	-.0962	-.1718	-.2482								
165.000	.0665		.3184		.1172	-.1080	-.2762								
180.000	.0716	.1182	.3171	.4783											
320.000	.2212	.2997	.3488	.0847	-.2881	-.2737	-.2474								

ARC11-019 IA81 LVAP(ELHL UNSEALD) ORB. FUSELAGE

(RETB08)

ALPHA0( 3) = 4.334 BETA0 ( 3) = 4.139

SECTION ( 1) ORBITER FUSELAGE

DEPENDENT VARIABLE CP

X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.2934	.7511	.2446	.1679	.1671	.7941		-.5351		-.1402	-.0793	-.1050	-.0954	-.0347	.1157
20.000			.2139	.1426	.1448	.3262		-.5399		-.1935					
40.000			.2669	.1306	.1095	.0875		-.6031		-.2235	-.1094	-.1447	-.1337	.0112	.1508
55.000			.3077	.1339	.0758	.0202		-.2627		-.4007					
70.000			.3278	.1251	.0356	.0345		-.1448		-.3030	-.6418	-.3590	-.3033	-.0590	
90.000		.4120	.3552	.1413	.0183	.0632		-.0567		-.2727	-.6598	-.4264	-.2979	-.0550	
120.000			.3836	.2113	.0786	.1998		.1757		-.3385	-.6092	-.8056	-.2798	-.0722	
140.000										-.5402					
150.000			.3811	.2584	.1672	.2702			.2726	-.6520	-.7090	-.5022	-.3929	-.0927	
151.000															
156.000								.6027							
162.000									.3420						
165.000										-.6011	-.7418	-.4604	-.4163	-.1067	
169.000							.8425	.7164							
174.000															
180.000	1.2934	.5767	.3870	.2945	.2266	.3252		.7190		-.7177	-.6298	-.4726	-.3650	-.1243	
305.000			.6218	.3984	.3285	.2272		-.0976		-.1394					
320.000			.4706	.2593	.2452	.2799		-.3913		-.0483	.0000	.0138	.0759	.1048	.2116
340.000			.3560	.1810	.2020	.5010		-.7161		.0213					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.2058	.3045	.4064	.1898	-.2305	-.2643	-.2606		-.2123	-.2175					
40.000	.2393	.3635	.4965	.3020	-.4309	-.2202	-.2606		-.2285	-.2290					
70.000	-.0320	-.2025	-.1875	.1426	-.0922	-.2666	-.4451								
90.000	.0227	-.1356	-.0175	.1317	-.1452	-.2620	-.3660								
105.000			.0874	.1312	-.2581	-.3280	-.3858								
110.000								-.3060							
120.000	.0801	.0130	.2008	.1979	-.2884	-.3838	-.4256	-.3233							
135.000			.2748	.2961	-.2400	-.3062	-.3506								
150.000	.1050	.1041	.2756	.2831	-.1497	-.2823	-.3445								
165.000	.0994		.2763		.0337	-.2113	-.3050								
180.000	.0877	.1267	.2766	.3519											
320.000	.1983	.2628	.2644	-.2586	-.2651	-.3057	-.2933								

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## IABIA - PRESSURE SOURCE DATA TABULATION

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ARC11-019 IAB1 LVAP(ELHL UNSEALD) ORB. FUSELAGE

(RETB08)

ALPHA0( 3) = 4.334 BETA0( 4) = 6.220

SECTION ( 1) ORBITER FUSELAGE

DEPENDENT VARIABLE CP

X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.2351	.7488	.2761	.1737	.1636	.7721		-.5005		-.1489	-.1863	-.1606	-.0948	-.1183	.0699
20.000			.2192	.1244	.1332	.2650		-.5598		-.2122					
40.000			.2177	.0924	.0870	.0227		-.6694		-.2155	-.1363	-.1911	-.2095	.0093	.1414
55.000			.2337	.0654	.0396	-.0271		-.3165		-.4642					
70.000			.2531	.0540	-.0048	-.0031		-.1899		-.3493	-.7252	-.4096	-.3281	.0131	
90.000		.2900	.2831	.0713	-.0245	.0213		-.1000		-.3218	-.7044	-.5155	-.2918	.0022	
120.000			.3187	.1472	.0253	.1691		.1153		-.3945	-.6540	-.8545	-.3027	-.0539	
140.000										-.6100					
150.000			.3273	.2161	.1233	.2487				-.6794	-.7250	-.5083	-.4813	-.1065	
151.000									.2070						
158.000								.5456							
162.000									.2976						
165.000										-.6248	-.7507	-.4786	-.4285	-.1408	
169.000								.6811							
174.000							.7806								
180.000	1.2351	.5228	.3580	.2691	.1980	.3082		.6725		-.7210	-.6282	-.5365	-.3869	-.1810	
305.000			.7079	.4803	.3956	.2715		-.0488		-.0279					
320.000			.5367	.3157	.2837	.2987		-.3366		-.0682	.0000	.0973	.0491	.1439	.2221
340.000			.3960	.2123	.2075	.5117		-.6498		.0789					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9500	.9990	1.0140	1.0450					
PHI															
.000	.1640	.2830	.3995	.1379	-.2492	-.2752	-.2709		-.2242	-.2229					
40.000	.2528	.3927	.5290	.3761	-.4323	-.2285	-.2760		-.2387	-.2387					
70.000	-.0281	-.1843	-.1673	.1627	-.0933	-.2650	-.4489								
90.000	.0303	-.1084	-.0440	.1787	-.1482	-.2754	-.3814								
105.000			.0411	.2084	-.2634	-.3310	-.3998								
110.000								-.3223							
120.000	.0826	.0228	.1514	.2955	-.3244	-.4051	-.4438	-.3282							
135.000			.2193	.3415	-.2282	-.3427	-.3869								
150.000	.0854	.0973	.2505	.2255	-.1429	-.3203	-.3930								
165.000	.0897		.2513		-.0282	-.2559	-.3165								
180.000	.0765	.1110	.2579	.2695											
320.000	.1946	.2643	.2619	-.2728	-.2665	-.3328	-.3226								



ARC11-019 IAB1 LVAP(ELHL UNSEALD) ORB. FUSELAGE

(RETB09) ( 17 OCT 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 976.0000 IN. XT  
 LREF = 1297.0000 INCHES YMRP = .0000 IN. YT  
 BREF = 1297.0000 INCHES ZMRP = 400.0000 IN. ZT  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

MACH = 1.100 RN/FT = 2.250  
 ELV-1B = 8.000 ELV-OB = 4.000  
 RUDDER = .000 SPDBRK = .000

ALPHA0( 1) = -6.236 BETA0( 1) = -4.085

## SECTION ( 1) ORBITER FUSELAGE

## DEPENDENT VARIABLE CP

X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.3159	.7371	.3741	.3240	.3325	.9312		-.3757		-.0518	-.2013	-.1532	-.3239	-.0249	.0825
20.000			.4139	.3399	.3261	.5423		-.3581		-.0696					
40.000			.5615	.3631	.3177	.3153		-.3469		-.3616	-.0574	-.1681	-.2570	-.0634	.1387
55.000			.6603	.4485	.3632	.2792		-.0058		-.1652					
70.000			.7070	.4819	.3756	.3045		.0942		-.0835	-.4968	-.2507	-.1825	-.0843	
90.000		.9177	.7430	.5193	.3935	.3375		.1540		-.0565	-.4223	-.3708	-.1612	-.0823	
120.000			.7670	.5932	.4769	.4833		.4039		-.0432	-.3238	-.5908	-.1642	-.0941	
140.000										-.0631					
150.000			.7269	.5865	.5195	.5473				-.3446	-.5615	-.3630	-.2175	-.1519	
151.000									.5369						
156.000								.8204							
162.000									.5845						
165.000										-.4662	-.4437	-.3286	-.2408	-.1793	
169.000								.8707							
174.000						1.0105									
180.000	1.3159	.8868	.6452	.5587	.5079	.5399		.7927		-.5844	-.4863	-.2638	-.2711	-.2060	
305.000			.3841	.2752	.2496	.1577		-.2723		-.3903					
320.000			.3733	.2802	.2922	.2132		-.6266		-.1302	.0000	-.1818	-.1845	-.0890	.0159
340.000			.3976	.3025	.3276	.4346		-.5068		-.0448					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1303	.2998	.5433	.1977	-.3918	-.3340	-.3504		-.2828	-.2924					
40.000	.0325	.1142	.2279	-.1884	-.4539	-.3583	-.3291		-.2758	-.2632					
70.000	.0518	-.0684	.2137	.3006	.0635	-.1360	-.3020								
90.000	.0696	.0060	.2749	.3080	.0328	-.0975	-.2121								
105.000			.3478	.3161	-.0611	-.1242	-.2168								
110.000								-.3756							
120.000	.0523	.1503	.4474	.3399	-.1006	-.1106	-.1623	-.3141							
135.000			.5061	.4918	-.0129	.0172	-.0643								
150.000	.0388	.2441	.5010	.4908	.0961	.0896	-.0467								
165.000	.0412		.4831		.3268	.1468	-.2894								
180.000	.0635	.2566	.4612	.5802											
320.000	.0777	.3154	.4737	.2147	-.3185	-.3024	-.3053								

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## 1A81A - PRESSURE SOURCE DATA TABULATION

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ARC11-019 1A81 LVAP(ELHL UNSEALD) ORB. FUSELAGE

(RETB09)

ALPHA0 ( 1 ) = -6.225 BETA0 ( 2 ) = -2.030

SECTION ( 1 ) ORBITER FUSELAGE		DEPENDENT VARIABLE CP													
X/LB	.0000	.0080	.0230	.0430	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.3238	.7401	.3814	.3371	.3391	.9321		-.3975		-.0644	-.1850	-.1406	-.1415	-.0482	.0611
20.000			.4062	.3405	.3266	.5142		-.3771		-.0549					
40.000			.5199	.3492	.3040	.2942		-.3947		-.3958	-.0898	-.2111	-.2885	-.0424	.1139
55.000			.5994	.4049	.3219	.2478		-.0492		-.2245					
70.000			.6401	.4276	.3212	.2651		.0537		-.1395	-.5402	-.2904	-.2091	-.0969	
90.000		.8382	.6790	.4630	.3377	.2951		.1081		-.1189	-.4792	-.4832	-.1861	-.0999	
120.000			.7197	.5541	.4354	.4460		.3562		-.1125	-.3789	-.6343	-.2027	-.1131	
140.000										-.1460					
150.000			.7083	.5798	.5064	.5327			.4939	-.4035	-.5413	-.3609	-.2508	-.1393	
151.000															
156.000								.7893							
162.000									.5542						
165.000										-.4675	-.4419	-.2720	-.2595	-.1427	
169.000								.8623							
174.000							1.0031								
180.000	1.3238	.8909	.6584	.5735	.5200	.5495		.8204		-.5427	-.5650	-.2392	-.2781	-.1437	
305.000			.4483	.3215	.2856	.1866		-.2339		-.3462					
320.000			.4141	.3077	.3129	.2535		-.5526		-.1033	.0000	-.1686	-.1750	-.0737	.0388
340.000			.4101	.3171	.3416	.4655		-.4937		-.0427					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1135	.2395	.4371	.1097	-.3969	-.3304	-.3397		-.2782	-.2945					
40.000	.0483	.1086	.1744	-.3066	-.3871	-.3443	-.3099		-.2696	-.2622					
70.000	.0541	.0295	.2278	.2790	.0364	-.1625	-.3221								
90.000	.0691	.0870	.2875	.2793	-.0110	-.1250	-.2284								
105.000			.3547	.2682	-.0966	-.1527	-.2358								
110.000								-.3936							
120.000	.0677	.2021	.4050	.2072	-.1422	-.1566	-.2142	-.3341							
135.000			.4848	.4720	-.0515	-.0412	-.1035								
150.000	.0596	.2632	.4963	.5062	.0659	.0275	-.0838								
165.000	.0576		.4895		.2724	.0874	-.3090								
180.000	.0626	.2757	.4794	.6500											
320.000	.0636	.2494	.4091	.1541	-.3189	-.2872	-.2968								

ORIGINAL PAGE IS  
OF POOR QUALITY

ARC11-019 IAB1 LVAP(ELHL UNSEALD) ORB. FUSELAGE

(RETB09)

ALPHA0 ( 1 ) = -6.193 BETA0 ( 3 ) = .032

SECTION ( 1 ) ORBITER FUSELAGE		DEPENDENT VARIABLE CP													
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.3263	.7420	.3798	.3383	.3380	.9396		-.4113		-.0792	-.1841	-.1566	-.1715	-.0611	.0534
20.000			.3919	.3326	.3208	.4829		-.3827		-.0518					
40.000			.4759	.3255	.2887	.2725		-.4385		-.4375	-.1133	-.1987	-.3196	-.0608	.0953
55.000			.5361	.3528	.2810	.2156		-.0975		-.2883					
70.000			.5706	.3673	.2729	.2292		.0097		-.1919	-.5912	-.3366	-.2410	-.1107	
90.000		.7489	.6115	.4001	.2813	.2500		.0618		-.1760	-.5332	-.5362	-.2109	-.1131	
120.000			.6656	.5009	.3852	.4019		.3010		-.1882	-.4380	-.6766	-.2680	-.1303	
140.000										-.3051					
150.000			.6821	.5627	.4863	.5129				-.4475	-.5407	-.3358	-.2778	-.1396	
151.000									.4444						
156.000								.7475							
162.000									.5128						
165.000										-.4709	-.4902	-.2504	-.2781	-.1369	
169.000								.8470							
174.000						.9791									
180.000	1.3263	.8845	.6666	.5782	.5248	.5565		.8361		-.4753	-.5651	-.2315	-.2757	-.1390	
305.000			.5134	.3660	.3202	.2160		-.1898		-.3017					
320.000			.4473	.3265	.3256	.2871		-.5017		-.0756	.0000	-.1603	-.2012	-.0683	.0642
340.000			.4314	.3275	.3447	.4966		-.4540		-.0251					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1159	.1893	.2808	.0843	-.3716	-.3334	-.3140		-.2826	-.2760					
40.000	.0635	.1305	.1731	-.1558	-.3773	-.3405	-.3147		-.2723	-.2670					
70.000	.0554	.0912	.2271	.2740	.0255	-.1757	-.3452								
90.000	.0737	.1433	.2777	.2906	-.0424	-.1541	-.2507								
105.000			.3365	.2264	-.1271	-.1798	-.2643								
110.000								-.3875							
120.000	.0794	.2213	.3750	.1744	-.1936	-.2159	-.2676	-.3458							
135.000			.4691	.4755	-.0920	-.1042	-.1492								
150.000	.0686	.2784	.4914	.5390	.0312	-.0351	-.1319								
165.000	.0645		.4921		.2294	.0207	-.3066								
180.000	.0679	.2926	.4935	.6791											
320.000	.0747	.1737	.2558	-.0481	-.3152	-.3150	-.3116								

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## 1A81A - PRESSURE SOURCE DATA TABULATION

PAGE 101

ARC11-019 1A81 LVAP(ELHL UNSEALD) ORB. FUSELAGE

(RETB09)

ALPHA( 1) = -6.179 BETA( 4) = 2.098

SECTION ( 1) ORBITER FUSELAGE		DEPENDENT VARIABLE CP													
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.3182	.7369	.3740	.3303	.3269	.9455		-.4257		-.0769	-.2337	-.1537	-.1641	-.0780	.0507
20.000			.3720	.3138	.3064	.4477		-.4055		-.0752					
40.000			.4291	.2966	.2676	.2369		-.4850		-.2992	-.1574	-.2113	-.3467	-.0598	.0832
55.000			.4741	.3043	.2429	.1843		-.1378		-.3317					
70.000			.5040	.3087	.2257	.1953		-.0316		-.2350	-.6352	-.4005	-.2546	-.1138	
90.000		.6564	.5457	.3371	.2271	.2072		.0219		-.2278	-.5813	-.5901	-.2222	-.1185	
120.000			.6103	.4464	.3314	.3553		.2462		-.2551	-.4860	-.7214	-.3805	-.1513	
140.000										-.4273					
150.000			.6482	.5385	.4569	.4846				-.4856	-.5501	-.2937	-.3184	-.1538	
151.000									.3931						
156.000								.7058							
162.000									.4743						
165.000										-.4606	-.5531	-.2475	-.2914	-.1470	
169.000								.8279							
174.000						.9667									
180.000	1.3182	.8683	.6640	.5750	.5180	.5474		.6326		-.5463	-.5504	-.2384	-.2694	-.1470	
305.000			.5811	.4120	.3512	.2399		-.1229		-.2419					
320.000			.4764	.3391	.3290	.3003		-.4495		-.0618	.0000	-.1175	-.2806	-.0182	.0980
340.000			.4383	.3263	.3379	.5187		-.4766		.0026					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1200	.2065	.3104	.1073	-.3330	-.3371	-.3295		-.2824	-.2761					
40.000	.0703	.1778	.3151	.0769	-.4431	-.3084	-.3180		-.2788	-.2848					
70.000	.0794	.1038	.2193	.2780	.0100	-.1892	-.3658								
90.000	.0960	.1595	.2676	.2902	-.0505	-.1841	-.2761								
105.000			.3097	.2088	-.1521	-.2041	-.2903								
110.000								-.3948							
120.000	.1051	.2190	.3425	.1102	-.2483	-.2740	-.3272	-.3468							
135.000			.4370	.4661	-.1332	-.1637	-.1952								
150.000	.0859	.2689	.4680	.5670	-.0062	-.1068	-.1827								
165.000	.0744		.4785		.1899	-.0368	-.2933								
180.000	.0690	.2844	.4686	.6680											
320.000	.0832	.1603	.1896	-.2226	-.3570	-.3292	-.3275								

ARC11-019 IAB1 LVAP(ELHL UNSEALD) ORB. FUSELAGE

(RE7B09)

ALPHA( 1) = -6.167 BETA( 5) = 4.163

SECTION ( 1) ORBITER FUSELAGE

DEPENDENT VARIABLE CP

X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.3027	.7164	.3473	.3084	.3008	.9227		-.4511		-.1103	-.2573	-.1997	-.1699	-.1046	.0301
20.000			.3325	.2800	.2751	.4029		-.4539		-.1004					
40.000			.3632	.2550	.2321	.1799		-.5336		-.2300	-.2183	-.2639	-.3633	-.0619	.0667
55.000			.3967	.2431	.1945	.1489		-.1838		-.3860					
70.000			.4257	.2411	.1674	.1572		-.0763		-.2863	-.6787	-.4586	-.2688	-.1063	
90.000		.5502	.4681	.2661	.1634	.1596		-.0231		-.2860	-.6325	-.6400	-.2559	-.1206	
120.000			.5419	.3828	.2667	.2690		.1803		-.3232	-.5326	-.7501	-.5123	-.1649	
140.000										-.4980					
150.000			.6034	.5039	.4197	.4459				-.5218	-.5656	-.3054	-.3588	-.1873	
151.000									.3296						
156.000								.6599							
162.000									.4226						
165.000										-.4298	-.5914	-.2661	-.3100	-.2036	
169.000								.7934							
174.000							.9383								
180.000	1.3027	.8443	.6524	.5611	.5057	.5368		.8134		-.5992	-.4664	-.2692	-.2731	-.2059	
305.000			.6355	.4508	.3841	.2669		-.0709		-.1792					
320.000			.4917	.3381	.3278	.3133		-.4071		-.0645	.0000	-.0602	-.3900	.0305	.1304
340.000			.4292	.3103	.3220	.5351		-.5234		.0262					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1080	.2115	.3487	.1593	-.3395	-.3479	-.3343		-.2888	-.2808					
40.000	.0738	.2115	.4015	.1702	-.5027	-.3059	-.3241		-.2855	-.2868					
70.000	.0931	.1034	.1924	.2785	-.0186	-.2181	-.3970								
90.000	.1013	.1566	.2425	.2741	-.0548	-.2185	-.3112								
105.000			.2844	.1976	-.1929	-.2368	-.3221								
110.000								-.3878							
120.000	.1030	.2042	.2983	.0299	-.3235	-.3475	-.3959	-.3348							
135.000			.3940	.4273	-.1886	-.2291	-.2612								
150.000	.0861	.2459	.4275	.5716	-.0586	-.1732	-.2480								
165.000	.0729		.4431		.1430	-.0908	-.3029								
180.000	.0597	.2587	.4655	.6051											
320.000	.0766	.1640	.1817	-.3185	-.3719	-.3628	-.3684								

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## IA81A - PRESSURE SOURCE DATA TABULATION

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ARC11-019 IA81 LVAP(ELHL UNSEALED) ORB. FUSELAGE

(RETB09)

ALPHA0( 2) = -4.143 BETA0 ( 1) = -6.157

SECTION ( 1) ORBITER FUSELAGE		DEPENDENT VARIABLE CP													
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.2906	.7381	.3506	.2930	.3015	.9238		-.3881		-.1611	-.1882	-.3267	-.3221	.0255	.1213
20.000			.4142	.3227	.3015	.5535		-.3373		-.1397					
40.000			.5996	.3746	.3176	.3275		-.2886		-.2162	-.1073	-.1154	-.2654	-.0306	.1771
55.000			.7137	.4922	.3945	.3060		.0395		-.1032					
70.000			.7567	.5239	.4043	.3319		.1342		-.0247	-.3799	-.1828	-.1786	-.0715	
90.000		.9702	.7773	.5552	.4191	.3681		.1971		.0135	-.3799	-.3039	-.1705	-.0833	
120.000			.7667	.5879	.4714	.4901		.4417		.0187	-.2901	-.5559	-.1965	-.1228	
140.000										-.0077					
150.000			.6831	.5337	.4724	.5126				-.1784	-.6058	-.4049	-.2232	-.1951	
151.000									.5553						
155.000								.8317							
162.000									.5878						
165.000										-.4845	-.5414	-.3982	-.2539	-.2317	
169.000								.8554							
174.000							.9879								
180.000	1.2906	.8230	.5641	.4868	.4404	.4826		.7285		-.6125	-.4717	-.3485	-.2944	-.2689	
305.000			.2942	.2051	.1942	.1073		-.3292		-.4368					
320.000			.3163	.2290	.2447	.1410		-.6918		-.1537	.0000	-.2056	-.1992	-.1047	.0259
340.000			.3675	.2593	.2944	.3872		-.5007		-.0578					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1558	.3311	.5655	.2150	-.3896	-.3377	-.3568		-.2766	-.2792					
40.000	.0458	.1287	.2390	-.1774	-.4780	-.3610	-.3605		-.2626	-.2506					
70.000	.0134	-.1562	.0910	.2789	.0759	-.1286	-.2996								
90.000	.0323	-.1007	.1802	.2931	.0485	-.0992	-.2136								
105.000			.2840	.3191	-.0395	-.1225	-.2207								
110.000								-.3670							
120.000	-.0181	-.0334	.4164	.3356	-.0844	-.0921	-.1411	-.3026							
135.000			.4749	.4503	-.0365	.0247	-.0579								
150.000	.0032	.1221	.4685	.4388	.0769	.1053	-.0386								
165.000	.0123		.4350		.3511	.1808	-.2698								
180.000	.0211	.1839	.4012	.4695											
320.000	.1487	.3847	.5425	.3039	-.3168	-.3314	-.3074								

ARC11-019 1A81 LVAP(ELHL UNSEALED) ORB. FUSELAGE

(RETB09)

ALPHA0 (2) = -4.132 BETA0 (2) = -4.105

SECTION (1) ORBITER FUSELAGE				DEPENDENT VARIABLE CP											
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.3041	.7467	.3649	.3104	.3149	.9167		-.3877		-.0564	-.2104	-.1279	-.2665	-.0224	.0966
20.000			.4116	.3266	.3071	.5317		-.3655		-.0773					
40.000			.5622	.3555	.3021	.3056		-.3459		-.3532	-.0429	-.1583	-.2487	-.0528	.1509
55.000			.6559	.4410	.3481	.2689		-.0061		-.1609					
70.000			.6940	.4669	.3529	.2900		.0913		-.0739	-.4937	-.2293	-.2045	-.0966	
90.000		.8971	.7180	.4975	.3676	.3230		.1550		-.0503	-.4328	-.3380	-.1852	-.1006	
120.000			.7259	.5547	.4384	.4554		.4001		-.0517	-.3328	-.5990	-.1943	-.1205	
140.000										-.0832					
150.000			.6786	.5362	.4718	.5091				-.3779	-.6009	-.4014	-.2327	-.1731	
151.000									.5234						
156.000								.8077							
162.000									.5672						
165.000										-.4861	-.4748	-.3778	-.2668	-.1927	
169.000								.8545							
174.000						.9916									
180.000	1.3041	.8333	.5900	.5085	.4595	.5006		.7706		-.5998	-.5208	-.3080	-.3015	-.1988	
305.000			.3680	.2557	.2270	.1383		-.2253		-.3951					
320.000			.3666	.2654	.2713	.1961		-.6382		-.1299	.0000	-.1842	-.1835	-.0726	.0341
340.000			.3955	.2843	.3104	.4231		-.5227		-.0551					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1614	.3187	.5462	.2111	-.3784	-.3200	-.3395		-.2621	-.2737					
40.000	.0544	.1382	.2423	-.1735	-.4377	-.3520	-.3257		-.2531	-.2462					
70.000	.0209	-.1384	.1455	.2714	.0531	-.1458	-.3139								
90.000	.0448	-.0770	.2157	.2768	.0214	-.1165	-.2307								
105.000			.2950	.2916	-.0723	-.1454	-.2341								
110.000								-.3546							
120.000	.0273	.0515	.4046	.3060	-.1195	-.1310	-.1759	-.3165							
135.000			.4743	.4550	-.0562	-.0225	-.0881								
150.000	.0404	.1897	.4713	.4476	.0540	.0532	-.0685								
165.000	.0407		.4487		.3017	.1147	-.2847								
180.000	.0492	.2214	.4271	.5066											
320.000	.1325	.3486	.4925	.2392	-.3085	-.2841	-.2925								

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## TABIA - PRESSURE SOURCE DATA TABULATION

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ARC11-019 TAB1 LVAP(ELHL UNSEALED) ORB. FUSELAGE

(RETB09)

ALPHA0( 2) = -4.101 BETA0 ( 3) = .017

SECTION ( 1) ORBITER FUSELAGE				DEPENDENT VARIABLE CP											
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.3120	.7461	.3646	.3101	.3091	.9224		-.4261		-.0857	-.1804	-.1408	-.1563	-.0538	.0643
20.000			.3760	.3064	.2915	.4700		-.4001		-.0518					
40.000			.4635	.3027	.2611	.2576		-.4424		-.4107	-.1157	-.1676	-.3025	-.0545	.1092
55.000			.5214	.3327	.2540	.2000		-.0999		-.2763					
70.000			.5524	.3419	.2418	.2105		.0023		-.1883	-.5871	-.3346	-.2640	-.1184	
90.000		.7258	.5872	.3746	.2499	.2337		.0615		-.1724	-.5417	-.5367	-.2265	-.1235	
120.000			.6313	.4647	.3493	.3766		.2980		-.1906	-.4478	-.6857	-.2536	-.1265	
140.000										-.2983					
150.000			.6357	.5150	.4383	.4762				-.4740	-.5729	-.3917	-.3057	-.1281	
151.000									.4286						
156.000								.7332							
162.000									.4943						
165.000										-.4889	-.5196	-.2965	-.3111	-.1271	
169.000								.8272							
174.000						.9575									
180.000	1.3120	.8314	.6120	.5259	.4738	.5154		.8137		-.5204	-.5925	-.2762	-.3098	-.1281	
305.000			.5014	.3401	.2955	.1989		-.1947		-.2905					
320.000			.4377	.3003	.2999	.2709		-.5082		-.0389	.0000	-.1357	-.1860	-.0525	.0765
340.000			.4188	.2969	.3173	.4841		-.4727		-.0301					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1329	.2026	.2821	.0824	-.3524	-.3268	-.3135			-.2754	-.2920				
40.000	.0863	.1503	.1808	-.1189	-.3761	-.3346	-.3060			-.2628	-.2561				
70.000	.0245	-.0609	.1862	.2412	.0080	-.1884	-.3497								
90.000	.0472	.0199	.2460	.2364	-.0498	-.1644	-.2627								
105.000			.3125	.2162	-.1306	-.1932	-.2756								
110.000								-.3810							
120.000	.0577	.1528	.3429	.0956	-.1895	-.2241	-.2733	-.3380							
135.000			.4215	.4182	-.1127	-.1269	-.1706								
150.000	.0628	.2210	.4432	.4699	.0017	-.0650	-.1560								
165.000	.0638		.4445		.2115	-.0074	-.2994								
180.000	.0607	.2406	.4492	.6096											
320.000	.0999	.1950	.2668	-.0261	-.3065	-.3118	-.3000								

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OF POOR QUALITY



ARC11-019 IAB1 LVAP(ELHL UNSEALD) ORB. FUSELAGE

(RETB09)

ALPHA0( 2) = -4.075 BETA0 ( 4) = 4.131

SECTION ( 1)ORBITER FUSELAGE				DEPENDENT VARIABLE CP											
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.2932	.7267	.3422	.2847	.2759	.9065		-.4796		-.1231	-.2612	-.1875	-.1845	-.1021	.0426
20.000			.3222	.2556	.2468	.3824		-.4749		-.1143					
40.000			.3526	.2309	.2031	.1649		-.5506		-.2103	-.2167	-.2534	-.2509	-.0516	.0791
55.000			.3812	.2177	.1625	.1224		-.2035		-.3922					
70.000			.4043	.2133	.1347	.1341		-.0909		-.2924	-.6846	-.4542	-.3176	-.1031	
90.000		.5212	.4440	.2387	.1310	.1440		-.0315		-.2860	-.6469	-.6483	-.2834	-.1113	
120.000			.5078	.3460	.2264	.2733		.1734		-.3312	-.5524	-.7747	-.4484	-.1431	
140.000										-.5171					
150.000			.5550	.4547	.3681	.4081				-.5606	-.6020	-.3508	-.3881	-.1901	
151.000									.3126						
156.000								.6416							
162.000									.4024						
165.000										-.4943	-.6234	-.3119	-.3413	-.1931	
169.000								.7725							
174.000						.9174									
180.000	1.2932	.7871	.5957	.5079	.4484	.4912		.7878		-.6248	-.5113	-.3190	-.3024	-.2114	
305.000			.6319	.4364	.3660	.2514		-.0800		-.1715					
320.000			.4923	.3237	.3061	.3003		-.4112		-.0417	.0000	-.0523	-.3867	.0456	.1371
340.000			.4232	.2895	.2962	.5206		-.5374		.0154					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1303	.2329	.3508	.1666	-.3181	-.3272	-.3138		-.2673	-.2636					
40.000	.1100	.2576	.4266	.2112	-.4787	-.2856	-.3036		-.2696	-.2676					
70.000	.0483	.0348	.1584	.2424	-.0317	-.2249	-.4022								
90.000	.0741	.0988	.2129	.2434	-.0761	-.2330	-.3352								
105.000			.2654	.1896	-.2008	-.2469	-.3363								
110.000								-.3621							
120.000	.0808	.1666	.2773	-.0026	-.3083	-.3566	-.3943	-.3271							
135.000			.3619	.3844	-.1954	-.2486	-.2768								
150.000	.0747	.2157	.3941	.4851	-.0758	-.1987	-.2693								
165.000	.0673		.4100		.1299	-.1175	-.2999								
180.000	.0592	.2184	.4296	.5278											
320.000	.0978	.1774	.1906	-.3035	-.3455	-.3485	-.3556								

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## 1A81A - PRESSURE SOURCE DATA TABULATION

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ARC11-019 1A81 LVAP(ELHL UNSEALED) ORB. FUSELAGE

(RETB09)

ALPHA0( 2) = -4.067 BETA0 ( 5) = 6.191

SECTION ( 1) ORBITER FUSELAGE		DEPENDENT VARIABLE CP													
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.2708	.7116	.3249	.2657	.2548	.8584		-.4454		-.1455	-.3820	-.1785	-.1406	-.1593	-.0088
20.000			.2864	.2210	.2214	.3286		-.4821		-.1827					
40.000			.2926	.1882	.1744	.1122		-.5949		-.1878	-.2626	-.2941	-.3487	-.0641	.0589
55.000			.3126	.1625	.1248	.0862		-.2429		-.4283					
70.000			.3349	.1560	.0913	.1083		-.1257		-.3245	-.7149	-.4953	-.3253	-.0641	
90.000		.4133	.3772	.1723	.0785	.1100		-.0692		-.3238	-.6817	-.6819	-.3020	-.0941	
120.000			.4433	.2822	.1638	.2370		.1171		-.3868	-.5807	-.7892	-.5361	-.1522	
140.000										-.5771					
150.000			.5014	.4078	.3204	.3701				-.5879	-.6241	-.3568	-.3955	-.2420	
151.000									.2526						
156.000								.5856							
162.000									.3565						
165.000										-.4818	-.6204	-.3287	-.3303	-.2844	
169.000								.7360							
174.000							.8804								
180.000	1.2708	.7443	.5685	.4802	.4202	.4704		.7539		-.6388	-.4848	-.3680	-.2806	-.2688	
305.000			.6972	.4924	.4103	.2926		-.0217		-.0743					
320.000			.5204	.3383	.3118	.3158		-.3482		-.0577	.0000	-.0249	-.3800	.0714	.1543
340.000			.4223	.2812	.2821	.5370		-.5406		.0417					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.0887	.2150	.3447	.1356	-.3111	-.3292	-.3329		-.2763	-.2673					
40.000	.1035	.2991	.4801	.3117	-.4805	-.2958	-.3244		-.2866	-.2806					
70.000	.0463	.0541	.1405	.2553	-.0513	-.2374	-.4197								
90.000	.0757	.1112	.1947	.2502	-.0851	-.2282	-.3414								
105.000			.2485	.1944	-.2204	-.2654	-.3600								
110.000								-.3450							
120.000	.0750	.1682	.2492	-.0594	-.3627	-.4079	-.4358	-.3156							
135.000			.3182	.3464	-.2397	-.3061	-.3318								
150.000	.0588	.1933	.3510	.5013	-.1249	-.2668	-.3213								
165.000	.0412		.3756		.0876	-.1719	-.3034								
180.000	.0226	.1855	.4061	.4979											
320.000	.0963	.1845	.1924	-.3111	-.3448	-.3953	-.3806								

ARC11-019 IAB1 LVAP(ELHL UNSEALD) ORB. FUSELAGE

(RETB09)

ALPHA0( 3) = -2.045 BETA0 ( 1) = -6.165

SECTION ( 1) ORBITER FUSELAGE		DEPENDENT VARIABLE CP													
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.2817	.7495	.3401	.2751	.2821	.9135		-.4062		-.1674	-.1949	-.2922	-.2807	.0326	.1452
20.000			.4074	.3098	.2841	.5445		-.3538		-.1322					
40.000			.5991	.3644	.3003	.3192		-.2750		-.1874	-.0018	-.0983	-.2526	-.0317	.2009
55.000			.7105	.4788	.3745	.2939		.0376		-.1024					
70.000			.7429	.5051	.3759	.3109		.1290		-.0232	-.3786	-.1597	-.1817	-.0742	
90.000		.9497	.7532	.5283	.3890	.3457		.1943		.0168	-.3898	-.2932	-.1952	-.0911	
120.000			.7222	.5445	.4262	.4512		.4331		.0121	-.3017	-.5492	-.2273	-.1604	
140.000										-.0306					
150.000			.6229	.4771	.4153	.4686				-.2118	-.6399	-.4489	-.2503	-.2194	
151.000									.5401						
156.000								.8174							
162.000									.5685						
165.000										-.5055	-.5843	-.4354	-.2811	-.2546	
169.000								.8367							
174.000						.9674									
180.000	1.2817	.7664	.5015	.4306	.3860	.4389		.7092		-.6291	-.5138	-.3921	-.3227	-.2735	
305.000			.2708	.1758	.1627	.0796		-.3463		-.4421					
320.000			.3125	.2075	.2196	.1185		-.7080		-.1595	.0000	-.2060	-.1932	-.0775	.0580
340.000			.3604	.2385	.2728	.3734		-.5133		-.0628					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1935	.3547	.5759	.2306	-.3820	-.3280	-.3395		-.2663	-.2643					
40.000	.0887	.1623	.2598	-.1577	-.4746	-.3703	-.3628		-.2483	-.2453					
70.000	-.0170	-.1766	-.1323	.2431	.0556	-.1482	-.3191								
90.000	.0060	-.1231	.0806	.2526	.0262	-.1241	-.2409								
105.000			.2307	.2719	-.0593	-.1529	-.2467								
110.000								-.3470							
120.000	-.0399	-.0715	.3801	.2800	-.1028	-.1238	-.1607	-.3104							
135.000			.4349	.3929	-.0826	-.0198	-.0838								
150.000	.0084	.0566	.4299	.3817	.0229	.0737	-.0634								
165.000	.0246		.3916		.3239	.1512	-.2698								
180.000	.0338	.1412	.3592	.4236											
320.000	.2089	.4143	.5577	.3283	-.3142	-.3093	-.2928								

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ARC11-019 IAB1 LVAP(ELHL UNSEALD) ORB. FUSELAGE

(RET809)

ALPHA0( 3) = -2.034 BETA0 ( 2) = -2.072

SECTION ( 1) ORBITER FUSELAGE		DEPENDENT VARIABLE CP													
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.3042	.7575	.3469	.2800	.2860	.9047		-.4209		-.0760	-.1604	-.1368	-.1008	-.0176	.0959
20.000			.3816	.2887	.2702	.4979		-.4180		-.0382					
40.000			.5089	.3079	.2530	.2726		-.3927		-.3901	-.0703	-.1371	-.2579	-.0260	.1522
55.000			.5831	.3661	.2698	.2189		-.0551		-.2133					
70.000			.6092	.3799	.2651	.2296		.0440		-.1300	-.5327	-.2452	-.2202	-.0987	
90.000		.7891	.6304	.4095	.2772	.2620		.1080		-.1040	-.4861	-.3989	-.2098	-.1078	
120.000			.6421	.4703	.3528	.3901		.3512		-.1196	-.3894	-.6412	-.2048	-.1301	
140.000										-.1716					
150.000			.6061	.4750	.4010	.4571				-.4399	-.6269	-.4349	-.2688	-.1297	
151.000									.4692						
156.000								.7645							
162.000									.5205						
165.000										-.4997	-.4996	-.3690	-.3028	-.1200	
169.000								.8249							
174.000							.9669								
180.000	1.3042	.7802	.5487	.4640	.4126	.4707		.7794		-.5996	-.6070	-.3155	-.3274	-.1122	
305.000			.4173	.2708	.2270	.1514		-.2487		-.3326					
320.000			.3893	.2520	.2552	.2266		-.5683		-.0872	.0000	-.1307	-.1364	-.0341	.0804
340.000			.3876	.2611	.2855	.4469		-.5332		-.0473					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1636	.2781	.4545	.1288	-.3751	-.3240	-.3119		-.2595	-.2635					
40.000	.1067	.1601	.2037	-.2832	-.3538	-.3452	-.3233		-.2473	-.2396					
70.000	.0198	-.1496	.0687	.2245	.0135	-.1754	-.3435								
90.000	.0445	-.0862	.1536	.2181	-.0276	-.1515	-.2610								
105.000			.2451	.2137	-.1178	-.1865	-.2708								
110.000								-.3420							
120.000	.0445	.0516	.3438	.2108	-.1630	-.2000	-.2307	-.3271							
135.000			.4064	.3919	-.1020	-.1036	-.1471								
150.000	.0681	.1812	.4111	.4057	.0068	-.0298	-.1316								
165.000	.0738		.4057		.2477	.0362	-.2927								
180.000	.0796	.2057	.4003	.5050											
320.000	.1564	.3239	.4448	.2070	-.3071	-.2751	-.2766								

## ARC11-019 1A81 LVAP(ELHL UNSEALD) ORB. FUSELAGE

(RETB09)

ALPHA0( 3) = -1.993 BETA0( 3) = 2.059

SECTION ( 1) ORBITER FUSELAGE				DEPENDENT VARIABLE CP											
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.3054	.7463	.3303	.2653	.2667	.9099		-.4588		-.1005	-.1486	-.1550	-.1421	-.0560	.0797
20.000			.3300	.2480	.2431	.4216		-.4564		-.0830					
40.000			.3902	.2359	.1996	.2013		-.5065		-.1644	-.1351	-.1696	-.2276	-.0320	.1146
55.000			.4339	.2460	.1712	.1420		-.1594		-.3243					
70.000			.4563	.2490	.1489	.1514		-.0518		-.2327	-.6279	-.3767	-.2928	-.1218	
90.000		.5969	.4918	.2754	.1533	.1722		.0118		-.2199	-.5930	-.5786	-.2509	-.1215	
120.000			.5365	.3686	.2490	.3083		.2370		-.2641	-.5097	-.7371	-.2622	-.1164	
140.000										-.4433					
150.000			.5520	.4365	.3562	.4111				-.5520	-.6045	-.3962	-.3616	-.1187	
151.000									.3626						
156.000								.6734							
162.000									.4343						
165.000										-.5192	-.6119	-.3350	-.3518	-.1248	
169.000								.7867							
174.000							.9263								
180.000	1.3054	.7591	.5523	.4662	.4114	.4659		.7867		-.6225	-.6089	-.3273	-.3288	-.1325	
305.000			.5554	.3693	.3065	.2198		-.1371		-.2160					
320.000			.4537	.2880	.2793	.2848		-.4555		-.0345	.0000	-.0773	-.1458	.0074	.1220
340.000			.4024	.2630	.2827	.5050		-.5444		-.0101					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1622	.2445	.3279	.1331	-.2987	-.3077	-.2983		-.2492	-.2439					
40.000	.1392	.2594	.3671	.1489	-.4301	-.2793	-.2875		-.2512	-.2572					
70.000	.0050	-.0795	.1305	.2155	-.0280	-.2134	-.3823								
90.000	.0357	-.0031	.1893	.2148	-.0818	-.2074	-.3064								
105.000			.2603	.2016	-.1716	-.2307	-.3196								
110.000								-.3472							
120.000	.0611	.1285	.2870	.0453	-.2320	-.2976	-.3394	-.3229							
135.000			.3607	.3801	-.1567	-.2021	-.2376								
150.000	.0722	.1930	.3847	.4166	-.0507	-.1564	-.2379								
165.000	.0725		.3935		.1607	-.0887	-.2823								
180.000	.0695	.2096	.3996	.5119											
320.000	.1340	.1950	.2155	-.2014	-.3198	-.3294	-.3080								

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ARC11-019 IAB1 LVAP(ELHL UNSEALD) ORB. FUSELAGE

(RET809)

ALPHA0( 3) = -1.978 BETA0( 4) = 6.163

SECTION ( 1) ORBITER FUSELAGE				DEPENDENT VARIABLE CP											
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.2582	.7129	.3046	.2324	.133	.8359		-.4712		-.1628	-.3663	-.1794	-.1067	-.1753	.0145
20.000			.2639	.1877	.1044	.3048		-.5031		-.2137					
40.000			.2660	.1525	.1351	.0826		-.6193		-.1957	-.2473	-.2741	-.2182	-.0402	.0793
55.000			.2843	.1261	.0796	.0566		-.2649		-.4407					
70.000			.3060	.1176	.0451	.0759		-.1457		-.3355	-.7254	-.4941	-.3470	-.0338	
90.000		.3738	.3446	.1380	.0346	.0855		-.0822		-.3294	-.6941	-.6859	-.3141	-.0541	
120.000			.4043	.2419	.1192	.2083		.1088		-.3976	-.6089	-.8150	-.4406	-.1062	
140.000										-.5954					
150.000			.4467	.3547	.2651	.3307				-.6223	-.6612	-.4029	-.4254	-.2022	
151.000									.2318						
156.000								.5684							
162.000									.3318						
165.000										-.5421	-.6592	-.3754	-.3634	-.2446	
169.000								.7169							
174.000						.8474									
180.000	1.2582	.6829	.5074	.4222	.3589	.4237		.7315		-.6604	-.5233	-.4229	-.3096	-.2849	
305.000			.6885	.4739	.3877	.2770		-.0288		-.0497					
320.000			.5169	.3180	.2884	.3033		-.3508		-.0695	.0000	.0072	-.3695	.0901	.1606
340.000			.4102	.2548	.2504	.5242		-.5604		.0353					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1125	.2339	.3548	.1222	-.3020	-.3277	-.3280		-.2688	-.2612					
40.000	.1467	.3355	.5004	.3357	-.4651	-.2844	-.3192		-.2799	-.2682					
70.000	.0145	-.0444	.0989	.2184	-.0638	-.2468	-.4307								
90.000	.0554	.0314	.1566	.2204	-.1068	-.2464	-.3569								
105.000			.2241	.1937	-.2190	-.2718	-.3685								
110.000								-.3530							
120.000	.0609	.1230	.2316	-.0512	-.3287	-.3950	-.4400	-.3204							
135.000			.2791	.3016	-.2461	-.3134	-.3456								
150.000	.0622	.1607	.3079	.4352	-.1496	-.2937	-.3432								
165.000	.0487		.3326		.0717	-.2035	-.3082								
180.000	.0334	.1342	.3645	.4402											
320.000	.1228	.2055	.2062	-.3034	-.3226	-.3865	-.3826								

## ARC11-019 IAB1 LVAF(ELHL UNSEALD) ORB. FUSELAGE

(RETB09)

ALPHA( 4) = .052 BETA( 1) = -6.173

SECTION ( 1) ORBITER FUSELAGE		DEPENDENT VARIABLE CP													
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.2696	.7550	.3275	.2511	.2574	.9004		-.4317		-.1675	-.1988	-.1853	-.2744	.0377	.1601
20.000			.4041	.2867	.2588	.5355		-.3954		-.1875					
40.000			.5976	.3493	.2825	.3076		-.2931		-.2099	.0029	-.0793	-.2051	-.0433	.2169
55.000			.7056	.4640	.3530	.2727		.0226		-.1041					
70.000			.7270	.4840	.3465	.2853		.1147		-.0251	-.3772	-.1516	-.1685	-.1018	
90.000		.9274	.7280	.4982	.3523	.3198		.1818		.0152	-.4000	-.2887	-.2071	-.1134	
120.000			.6783	.4942	.3691	.4067		.4206		-.0049	-.3215	-.5506	-.2681	-.2150	
140.000										-.0551					
150.000			.5679	.4139	.3544	.4193				-.2314	-.6766	-.5164	-.2803	-.2581	
151.000									.5219						
156.000								.8010							
162.000									.5450						
165.000										-.5441	-.6270	-.4782	-.3105	-.2795	
169.000								.8176							
174.000							.9438								
180.000	1.2696	.7130	.4441	.3712	.3271	.3923		.6851		-.6575	-.5607	-.4406	-.3579	-.2544	
305.000			.2502	.1497	.1344	.0480		-.3659		-.4545					
320.000			.2884	.1812	.1965	.0911		-.7278		-.1832	.0000	-.2145	-.1780	-.0600	.0798
340.000			.3422	.2138	.2529	.3602		-.5288		-.0708					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.2200	.3700	.5806	.2401	-.3765	-.3229	-.3334		-.2608	-.2585					
40.000	.1038	.1866	.2792	-.1316	-.4388	-.3767	-.3612		-.2448	-.2435					
70.000	-.0624	-.1962	-.2649	.2097	.0309	-.1666	-.3456								
90.000	-.0275	-.1536	-.0341	.2178	.0052	-.1463	-.2707								
105.000			.1692	.2334	-.0736	-.1859	-.2758								
110.000								-.3207							
120.000	-.0472	-.1079	.3448	.2419	-.1199	-.1701	-.1840	-.3221							
135.000			.3908	.3342	-.1199	-.0667	-.1166								
150.000	.0203	.0244	.3874	.3308	-.0242	.0316	-.0938								
165.000	.0379		.3502		.2989	.1204	-.2817								
180.000	.0453	.1195	.3200	.3727											
320.000	.2500	.4355	.5702	.3500	-.3158	-.2989	-.2854								

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## 1A81A - PRESSURE SOURCE DATA TABULATION

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ARC11-019 1A81 LVAP(ELHL UNSEALD) ORB. FUSELAGE

(RETB09)

ALPHA0 ( 4 ) = .055 BETA0 ( 2 ) = -4.122

SECTION ( 1 ) ORBITER FUSELAGE		DEPENDENT VARIABLE CP													
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.2901	.7573	.3232	.2443	.2586	.8953		-.4275		-.0578	-.1565	-.1413	-.1399	-.0178	.1384
20.000			.3803	.2683	.2485	.5165		-.4279		-.0801					
40.000			.5481	.3085	.2512	.2795		-.3554		-.3755	-.0513	-.0986	-.1906	-.0550	.1888
55.000			.6383	.3981	.2964	.2320		-.0269		-.1674					
70.000			.6583	.4140	.2880	.2469		.0673		-.0801	-.4894	-.1945	-.1798	-.1050	
90.000		.8463	.6652	.4322	.2934	.2803		.1354		-.0490	-.4467	-.3098	-.2259	-.1162	
120.000			.6438	.4583	.3338	.3901		.3789		-.0734	-.3647	-.6173	-.2555	-.1906	
140.000										-.1260					
150.000			.5663	.4173	.3512	.4236				-.4240	-.6704	-.4862	-.2623	-.2031	
151.000									.4913						
156.000									.7773						
162.000									.5271						
165.000										-.5394	-.5874	-.4696	-.3039	-.1781	
169.000								.8145							
174.000						.9496									
180.000	1.2901	.7242	.4744	.3947	.3458	.4127		.7227		-.6511	-.5982	-.3952	-.3563	-.1547	
305.000			.3245	.1958	.1648	.0821		-.3195		-.4033					
320.000			.3251	.2029	.2115	.1555		-.6647		-.1416	.0000	-.1517	-.1456	-.0403	.0771
340.000			.3450	.2198	.2518	.3997		-.5490		-.0622					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.2223	.3625	.5544	.2308	-.3786	-.3144	-.3209			-.2557	-.2587				
40.000	.1133	.1979	.2861	-.1522	-.4206	-.3560	-.3300			-.2377	-.2364				
70.000	-.0319	-.1997	-.1756	.2003	.0098	-.1772	-.3575								
90.000	-.0019	-.1473	.0395	.2027	-.0264	-.1590	-.2823								
105.000			.1946	.2145	-.1157	-.1985	-.2921								
110.000								-.3146							
120.000	-.0252	-.0492	.3342	.2199	-.1533	-.2080	-.2185	-.3234							
135.000			.3918	.3529	-.1313	-.1084	-.1447								
150.000	.0583	.1015	.3898	.3519	-.0316	-.0264	-.1203								
165.000	.0650		.3728		.2465	.0495	-.2868								
180.000	.0772	.1608	.3441	.4050											
320.000	.2303	.4036	.5291	.2883	-.3124	-.2718	-.2740								

ORIGINAL PAGE IS  
OF POOR QUALITY



ARC11-019 IAB1 LVAP(ELHL UNSEALD) ORB. FUSELAGE

(RETB09)

ALPHA0 ( 4 ) = .063 BETA0 ( 3 ) = -.022

SECTION ( 1 ) ORBITER FUSELAGE		DEPENDENT VARIABLE CP													
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.3225	.7454	.2787	.2211	.2191	.8871		-.4180		-.0575	-.1095	-.1193	-.1103	-.0201	.0994
20.000			.3043	.2205	.1998	.4457		-.5384		-.0538					
40.000			.4277	.2269	.1720	.2156		-.4512		-.2066	-.1091	-.1350	-.1767	-.0442	.1438
55.000			.4913	.2743	.1761	.1498		-.1129		-.2745					
70.000			.5113	.2845	.1612	.1560		-.0164		-.1876	-.5927	-.2985	-.2442	-.1401	
90.000		.6721	.5355	.3096	.1869	.1851		.0502		-.1665	-.5566	-.4198	-.2540	-.1398	
120.000			.5532	.3760	.2508	.3142		.2869		-.2040	-.4656	-.7123	-.2360	-.1360	
140.000										-.3030					
150.000			.5304	.4028	.3224	.3916				-.5301	-.6756	-.4916	-.3337	-.1140	
151.000									.4027						
156.000								.7067							
162.000									.4581						
165.000										-.5471	-.5900	-.3886	-.3672	-.1042	
169.000								.7902							
174.000						.9210									
180.000	1.3225	.7205	.4937	.4116	.3532	.4255		.7678		-.8695	-.6522	-.3638	-.3713	-.1038	
305.000			.4553	.2781	.2200	.1419		-.2114		-.2628					
320.000			.3797	.2228	.2084	.2115		-.5198		-.0673	.0000	-.0893	-.0933	-.0295	.1103
340.000			.3445	.2093	.2210	.4406		-.5133		-.0071					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1740	.2436	.3063	.0923	-.3745	-.3219	-.3031		-.2566	-.2566					
40.000	.1248	.2073	.2209	-.0474	-.4307	-.3372	-.3096		-.2529	-.2543					
70.000	-.0390	-.1893	.0049	.1812	-.0243	-.2067	-.3772								
90.000	-.0007	-.1248	.1049	.1683	-.0694	-.1846	-.2997								
105.000			.1988	.1588	-.1633	-.2212	-.3130								
110.000								-.3470							
120.000	.0275	.0754	.2687	.1988	-.1836	-.2619	-.2987	-.3357							
135.000			.3131	.3893	-.0755	-.1660	-.2184								
150.000	.0573	.1720	.3226	.4181	-.0097	-.1126	-.2024								
165.000	.0645		.3385		.1730	-.0473	-.2915								
180.000	.0658	.1731	.3477	.4910											
320.000	.1649	.2612	.3189	.0642	-.3182	-.3269	-.2861								

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## 1A81A - PRESSURE SOURCE DATA TABULATION

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ARC11-019 1A81 LVAP(ELHL UNSEALD) ORB. FUSELAGE

(RETB09)

ALPHA( 4) = .079 BETA( 4) = 4.095

SECTION ( 1) ORBITER FUSELAGE		DEPENDENT VARIABLE CP													
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.2912	.7356	.2891	.2162	.2152	.8718		-.5138		-.1377	-.1183	-.1531	-.1200	-.0725	.0770
20.000			.2701	.1850	.1864	.3577		-.5128		-.1312					
40.000			.3074	.1674	.1350	.1267		-.5790		-.1845	-.1387	-.1895	-.2083	-.0164	.1171
55.000			.3402	.1603	.0934	.0661		-.2323		-.3880					
70.000			.3623	.1559	.0629	.0827		-.1137		-.2900	-.6773	-.4177	-.3123	-.0830	
90.000		.4663	.3951	.1843	.0599	.0991		-.0445		-.2764	-.6521	-.6000	-.2720	-.0881	
120.000			.4411	.2738	.1458	.2252		.1695		-.3394	-.5804	-.7865	-.2936	-.1012	
140.000										-.5339					
150.000			.4607	.3517	.2625	.3353			.2920	-.6169	-.6521	-.4277	-.4190	-.1349	
151.000															
156.000								.6188							
162.000									.3707						
165.000										-.5540	-.6783	-.3881	-.3774	-.1502	
169.000								.7383							
174.000							.8853								
180.000	1.2912	.6789	.4849	.4013	.3344	.4064		.7475		-.6707	-.5900	-.4010	-.3288	-.1719	
305.000			.6106	.3989	.3207	.2328		-.0893		-.1499					
320.000			.4713	.2761	.2533	.2816		-.4049		-.0193	.0000	-.0090	-.1506	.0669	.1633
340.000			.3825	.2267	.2348	.5076		-.5840		.0161					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1772	.2774	.3735	.1797	-.2864	-.3053	-.2976		-.2493	-.2470					
40.000	.1687	.3327	.4743	.2750	-.4635	-.2640	-.2875		-.2510	-.2503					
70.000	.0016	-.1313	.0534	.1797	-.0702	-.2470	-.4213								
90.000	.0484	-.0503	.1151	.1723	-.1231	-.2501	-.3499								
105.000			.1919	.1753	-.2141	-.2762	-.3618								
110.000								-.3383							
120.000	.0739	.0910	.2380	.0180	-.2762	-.3625	-.4000	-.3268							
135.000			.3038	.3082	-.2016	-.2779	-.3098								
150.000	.0895	.1576	.3231	.3649	-.1040	-.2362	-.3051								
165.000	.0854		.3306		.0777	-.1608	-.3084								
180.000	.0810	.1565	.3492	.4100											
320.000	.1573	.2244	.2296	-.2830	-.3087	-.3513	-.3363								

ARC11-019 IA81 LVAP(ELHL UNSEALD) ORB. FUSELAGE

(RETB09)

ALPHA( 4) = .086 BETAO ( 5) = 6.161

SECTION ( 1) ORBITER FUSELAGE				DEPENDENT VARIABLE CP											
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.2543	.7185	.2816	.2014	.1933	.8200		-.4867		-.1582	-.2817	-.1692	-.1469	-.1588	.0361
20.000			.2381	.1580	.1581	.2898		-.5197		-.2132					
40.000			.2433	.1261	.1090	.0610		-.6328		-.2026	-.1861	-.2494	-.2452	-.0196	.1020
55.000			.2616	.0987	.0559	.0237		-.2769		-.4451					
70.000			.2840	.0919	.0186	.0397		-.1533		-.3379	-.7266	-.4748	-.3409	.0179	
90.000		.3491	.3202	.1132	.0068	.0554		-.0858		-.3257	-.7001	-.6603	-.3008	-.0125	
120.000			.3696	.2109	.0826	.1792		.1078		-.4026	-.6291	-.8302	-.3573	-.0796	
140.000										-.6007					
150.000			.4034	.3068	.2137	.2924				-.6463	-.6920	-.4395	-.4501	-.1682	
151.000									.2206						
156.000								.5584							
162.000									.3202						
165.000										-.5751	-.6930	-.4121	-.3902	-.2120	
169.000								.7051							
174.000							.8195								
180.000	1.2543	.6321	.4559	.3684	.3025	.3831		.7129		-.6807	-.5618	-.4643	-.3404	-.2735	
305.000			.6854	.4601	.3747	.2675		-.0362		-.0159					
320.000			.5136	.3003	.2703	.2952		-.3525		-.0377	.0000	.0363	-.3536	.1006	.1756
340.000			.3943	.2241	.2244	.5189		-.5950		.0508					
X/LB															
	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1396	.2533	.3692	.1205	-.2842	-.3177	-.3114			-.2524	-.2507				
40.000	.1783	.3689	.5227	.3619	-.4514	-.2672	-.3050			-.2624	-.2580				
70.000	.0028	-.1141	.0480	.1876	-.0813	-.2522	-.4365								
90.000	.0479	-.0314	.1064	.1941	-.1397	-.2655	-.3648								
105.000			.1862	.1954	-.2271	-.2903	-.3757								
110.000								-.3314							
120.000	.0639	.0853	.2168	.0203	-.3120	-.4012	-.4454	-.3243							
135.000			.2527	.2725	-.2393	-.3288	-.3562								
150.000	.0713	.1380	.2721	.3847	-.1684	-.3138	-.3599								
165.000	.0625		.2938		.0379	-.2268	-.3144								
180.000	.0516	.1142	.3260	.3870											
320.000	.1496	.2263	.2209	-.3025	-.3076	-.3675	-.3786								

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## IABIA - PRESSURE SOURCE DATA TABULATION

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ARC11-019 IAB1 LVAP(ELHL UNSEALD) ORB. FUSELAGE

(RETB09)

ALPHA0( 5) = 2.173 BETA0 ( 1) = -6.160

SECTION ( 1) ORBITER FUSELAGE		DEPENDENT VARIABLE CP													
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.2687	.7603	.3056	.2288	.2474	.8840		-.4443		-.1677	-.1744	-.1325	-.2079	.0548	.1846
20.000			.3895	.2710	.2507	.5316		-.4225		-.2341					
40.000			.5988	.3494	.2798	.3042		-.2968		-.3422	.0212	-.0627	-.0237	-.0318	.2424
55.000			.7016	.4632	.3524	.2670		.0102		-.1206					
70.000			.7172	.4726	.3362	.2738		.0993		-.0328	-.3927	-.1220	-.1193	-.1180	
90.000		.9083	.7092	.4777	.3294	.3015		.1725		.0142	-.3991	-.2793	-.1930	-.1264	
120.000			.6378	.4510	.3226	.3680		.4113		-.0093	-.3375	-.5650	-.3344	-.2745	
140.000										-.0617					
150.000			.5171	.3561	.2977	.3742				-.2272	-.6972	-.5707	-.3002	-.2824	
151.000									.5099						
155.000								.7884							
162.000									.5295						
165.000										-.5673	-.6515	-.5119	-.3266	-.2567	
169.000								.8006							
174.000							.9263								
180.000	1.2687	.6616	.3905	.3169	.2728	.3503		.6651		-.6732	-.5950	-.4757	-.3760	-.1999	
305.000			.2253	.1261	.1236	.0235		-.3801		-.4028					
320.000			.2663	.1548	.1898	.0781		-.7379		-.1697	.0000	-.1687	-.1582	-.0364	.1091
340.000			.3193	.1842	.2403	.3503		-.5278		-.0776					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.2499	.3900	.5925	.2542	-.3509	-.3009	-.3132		-.2475	-.2428					
40.000	.1413	.2238	.3042	-.1193	-.4108	-.3665	-.3383		-.2272	-.2338					
70.000	-.0794	-.2198	-.2937	.1761	.0144	-.1845	-.3698								
90.000	-.0557	-.1728	-.1314	.1822	-.0157	-.1679	-.2959								
105.000			.1082	.1984	-.0932	-.2143	-.3010								
110.000								-.2925							
120.000	-.1156	-.1260	.3066	.1988	-.1338	-.2193	-.2118	-.3197							
135.000			.3505	.2830	-.1503	-.1067	-.1440								
150.000	.0462	.0271	.3495	.2739	-.0712	-.0046	-.1186								
165.000	.0668		.3100		.2718	.0930	-.2790								
180.000	.0746	.1197	.2802	.2989											
320.000	.2905	.4580	.5854	.3625	-.3120	-.2881	-.2698								

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ARC11-019 1A81 LVAP(ELHL UNSEALD) ORB. FUSELAGE

(RETS39)

ALPHA0( 5) = 2.175 BETA0 ( 2) = -2.076

SECTION ( 1) ORBITER FUSELAGE				DEPENDENT VARIABLE CP											
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.3208	.7593	.2578	.1929	.2072	.8690		-.4189		-.0543	-.0950	-.0977	-.0736	.0046	.1327
20.000			.3116	.2109	.1997	.4906		-.5639		-.0502					
40.000			.4743	.2529	.1902	.2435		-.3949		-.3289	-.0692	-.0882	-.0895	-.0478	.1843
55.000			.5557	.3262	.2164	.1841		-.0675		.2192					
70.000			.5719	.3323	.1977	.1872		.0282		-.1325	-.5423	-.2286	-.1946	-.1457	
90.000		.7483	.5832	.3495	.1977	.2152		.0996		-.1024	-.5037	-.2856	-.2487	-.1481	
120.000			.5615	.3831	.2531	.3229		.3386		-.1336	-.4236	-.6657	-.2754	-.1911	
140.000										-.2024					
150.000			.5002	.3590	.2875	.3687				-.4831	-.7055	-.5230	-.2778	-.1217	
151.000									.4411						
156.000								.7407							
162.000									.4807						
165.000										-.5617	-.5929	-.4777	-.3340	-.1065	
169.000								.7918							
174.000							.9342								
180.000	1.3208	.6760	.4298	.3484	.2981	.3762		.7363		-.6854	-.6780	-.4063	-.3875	-.0974	
305.000			.3674	.2092	.1729	.0772		-.2691		-.2565					
320.000			.3231	.1736	.1886	.1537		-.5862		-.0747	.0000	-.0976	-.0820	-.0095	.1185
340.000			.3038	.1699	.2087	.3940		-.4874		-.0177					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.2073	.2983	.4516	.1404	-.3655	-.3039	-.2953		-.2386	-.2403					
40.000	.1465	.2046	.2256	-.2682	-.3405	-.3418	-.3014		-.2250	-.2217					
70.000	-.0511	-.2246	-.2375	.1516	-.0313	-.2166	-.3834								
90.000	-.0193	-.1742	-.0051	.1455	-.0732	-.2061	-.3044								
105.000			.1665	.1549	-.1617	-.2522	-.3119								
110.000								-.2908							
120.000	-.0132	-.0379	.2776	.1404	-.1980	-.2651	-.2817	-.3288							
135.000			.3288	.3040	-.1638	-.1700	-.2166								
150.000	.0538	.1172	.3298	.3036	-.0738	-.0948	-.1948								
165.000	.0663		.3017		.1772	-.0260	-.2878								
180.000	.0751	.1645	.3075	.3820											
320.000	.2195	.3614	.4658	.2259	-.3046	-.2723	-.2651								

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## 1A81A - PRESSURE SOURCE DATA TABULATION

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ARC11-019 1A81 LVAP(ELHL UNSEALED) ORB. FUSELAGE

(RET809)

ALPHA0( 5) = 2.187 BETA0 ( 3) = 2.048

SECTION ( 1) ORBITER FUSELAGE					DEPENDENT VARIABLE CP										
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.3165	.7406	.2379	.1849	.1861	.8692		-.4192		-.0506	-.0856	-.1053	-.0955	-.0193	.1131
20.000			.2462	.1734	.1641	.3834		-.5193		-.0547					
40.000			.3476	.1805	.1266	.1488		-.5224		-.1404	-.1274	-.1488	-.0983	-.0129	.1460
55.000			.4024	.2069	.1175	.0746		-.1831		-.3090					
70.000			.4224	.2059	.0871	.0841		-.0770		-.2308	-.6229	-.3310	-.2683	-.1257	
90.000		.5573	.4476	.2272	.0844	.1138		-.0045		-.2125	-.6002	-.4005	-.2768	-.1162	
120.000			.4676	.2928	.1550	.2406		.2318		-.2752	-.5371	-.7539	-.2516	-.1101	
140.000										-.4497					
150.000			.4545	.3300	.2394	.3253				-.6015	-.6952	-.5028	-.3613	-.0998	
151.000									.3396						
156.000								.6561							
162.000									.4033						
165.000										-.5754	-.6783	-.4184	-.3989	-.0984	
169.000								.7558							
174.000						.8969									
180.000	1.3165	.6543	.4383	.3537	.2859	.3728		.7470		-.7092	-.6779	-.4100	-.3654	-.1025	
305.000			.5252	.3229	.2514	.1722		-.1482		-.2127					
320.000			.4064	.2202	.2111	.2361		-.4479		-.0765	.0000	-.0373	-.0044	.0158	.1527
340.000			.3239	.1820	.1977	.4729		-.5180		-.0004					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.2005	.2769	.3422	.1516	-.3089	-.2820	-.2736		-.2270	-.2220					
40.000	.1673	.2955	.3987	.1722	-.4678	-.2810	-.2777		-.2280	-.2343					
70.000	-.0564	-.1865	-.0796	.1584	-.0664	-.2404	-.4159								
90.000	.0029	-.1232	.0455	.1492	-.1182	-.2299	-.3364								
105.000			.1487	.1357	-.2192	-.2729	-.3476								
110.000								-.2945							
120.000	.0489	.0337	.2336	.2035	-.2215	-.3286	-.3634	-.3336							
135.000			.2936	.2994	-.1497	-.2400	-.2867								
150.000	.0760	.1291	.3122	.3339	-.1020	-.1972	-.2762								
165.000	.0750		.3142		.1018	-.1367	-.3020								
180.000	.0716	.1484	.3163	.3888											
320.000	.1807	.2377	.2412	-.1531	-.3332	-.3354	-.3003								

ORIGINAL PAGE IS  
OF POOR QUALITY

ARC11-019 IAB1 LVAP(ELHL UNSEALD) ORB. FUSELAGE

(RETB09)

ALPHA0( 5) = 2.192 BETA0( 4) = 6.163

## SECTION ( 1) ORBITER FUSELAGE

## DEPENDENT VARIABLE CP

X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.2432	.7274	.2642	.1763	.1690	.8048		-.5099		-.1625	-.1880	-.1675	-.1076	-.1184	.0625
20.000			.2155	.1297	.1368	.2710		-.5421		-.2291					
40.000			.2189	.1002	.0893	.0355		-.6597		-.2152	-.1370	-.2168	-.2183	-.0043	.1243
55.000			.2359	.0730	.0343	-.0132		-.3000		-.4629					
70.000			.2587	.0642	-.0047	.0032		-.1739		-.3521	-.7323	-.4555	-.3368	.0103	
90.000		.3138	.2922	.0863	-.0193	.0238		-.0991		-.3328	-.7079	-.5874	-.2981	-.0050	
120.000			.3347	.1736	.0451	.1458		.1015		-.4015	-.6481	-.8516	-.3186	-.0427	
140.000										-.6071					
150.000			.3568	.2557	.1606	.2478				-.6659	-.7191	-.4835	-.4818	-.1226	
151.000									.2031						
156.000								.5452							
162.000									.2996						
165.000										-.6078	-.7262	-.4550	-.4218	-.1637	
169.000								.6870							
174.000						.7895									
180.000	1.2432	.5732	.3958	.3095	.2419	.3338		.6894		-.7036	-.6050	-.5113	-.3742	-.2184	
305.000			.6840	.4551	.3670	.2568		-.0508		-.0558					
320.000			.5125	.2919	.2507	.2855		-.3582		-.0762	.0000	.0622	-.2735	.1022	.1929
340.000			.3861	.2043	.2028	.5041		-.6481		.0045					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1623	.2688	.3861	.1341	-.2853	-.3170	-.3030		-.2371	-.2401					
40.000	.2051	.3879	.5360	.3689	-.4633	-.2692	-.3017		-.2501	-.2554					
70.000	-.0200	-.1663	-.0709	.1558	-.0941	-.2661	-.4450								
90.000	.0254	-.0957	-.0024	.1649	-.1535	-.2753	-.3805								
105.000			.0850	.1792	-.2449	-.3116	-.3917								
110.000										-.3154					
120.000	.0553	.0494	.1718	.1820	-.3000	-.4002	-.4430			-.3249					
135.000			.2378	.2795	-.2023	-.3305	-.3819								
150.000	.0685	.1278	.2385	.2999	-.1589	-.3217	-.3755								
165.000	.0665		.2480		-.0217	-.2402	-.3066								
180.000	.0587	.1122	.2781	.2944											
320.000	.1727	.2441	.2354	-.2948	-.3089	-.3726	-.3575								

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## IABIA - PRESSURE SOURCE DATA TABULATION

PAGE 121

ARC11-019 IAB1 LVAP(ELHL UNSEALD) ORB. FUSELAGE

(RETB09)

ALPHA0 ( 6 ) = 4.247 BETA0 ( 1 ) = -6.141

SECTION ( 1 ) ORBITER FUSELAGE		DEPENDENT VARIABLE CP													
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.2618	.7735	.2984	.2113	.2348	.8772		-.4653		-.1784	-.1556	-.1367	-.1494	.0774	.1938
20.000			.3900	.2653	.2446	.5288		-.4461		-.2631					
40.000			.6092	.3587	.2912	.3061		-.2934		-.3345	.0435	-.0543	.0530	-.0132	.2543
55.000			.7084	.4771	.3651	.2614		.0057		-.1103					
70.000			.7108	.4758	.3347	.2638		.0907		-.0335	-.3841	-.0879	-.0937	-.1471	
90.000		.8863	.6891	.4657	.3148	.2815		.1638		.0180	-.4037	-.2731	-.1613	-.1538	
120.000			.6017	.4080	.2764	.3289		.4020		-.0151	-.3519	-.5731	-.4253	-.3344	
140.000										-.0733					
150.000			.4653	.3034	.2437	.3265				-.2020	-.7291	-.6191	-.3367	-.2933	
151.000									.4999						
156.000								.7733							
162.000									.5134						
165.000										-.5986	-.6867	-.5464	-.3432	-.2203	
169.000								.7827							
174.000						.9000									
180.000	1.2618	.6104	.3369	.2669	.2202	.3081		.6420		-.6962	-.6359	-.5153	-.3908	-.1666	
305.000			.2037	.1042	.1142	.0000		-.3983		-.3189					
320.000			.2437	.1359	.1820	.0597		-.7514		-.1607	.0000	-.1555	-.1427	-.0242	.1252
340.000			.3027	.1686	.2308	.3327		-.5282		-.0872					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.2543	.3861	.5927	.2562	-.3397	-.2939	-.3002		-.2471	-.2381					
40.000	.1482	.2302	.3117	-.1166	-.4761	-.3594	-.3199		-.2274	-.2281					
70.000	-.1101	-.2931	-.3503	.1284	-.0126	-.2000	-.3764								
90.000	-.0854	-.2166	-.2105	.1180	-.0399	-.1885	-.3066								
105.000			.0709	.1433	-.1155	-.2446	-.3192								
110.000								-.2817							
120.000	-.1858	-.1835	.2647	.1458	-.1506	-.2579	-.2407	-.3017							
135.000			.2934	.2275	-.1773	-.1499	-.1790								
150.000	.0032	.0584	.2880	.2295	-.1263	-.0364	-.1448								
165.000	.0452		.2650		.2193	.0760	-.2790								
180.000	.0624	.239	.2548	.2744											
320.000	.2975	.4502	.5769	.3528	-.3111	-.2836	-.2617								



ARC11-019 IA81 LVAP(ELHL UNSEALD) ORB. FUSELAGE

(RETS09)

ALPHA0( 6) = 4.249 BETA0 ( 2) = -4.095

SECTION ( 1)ORBITER FUSELAGE				DEPENDENT VARIABLE CP											
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.3052	.7650	.2555	.1897	.2223	.8708		-.4734		-.0846	-.1229	-.1087	-.0208	.0331	.1756
20.000			.3354	.2276	.2210	.5239		-.5507		-.0528					
40.000			.5393	.3079	.2504	.2817		-.3388		-.4121	-.0104	-.0588	-.0235	-.0109	.2283
55.000			.6285	.3990	.3007	.2203		-.0386		-.1649					
70.000			.6361	.3960	.2639	.2202		.0521		-.0822	-.4786	-.1480	-.1441	-.1608	
90.000		.8173	.6282	.3994	.2504	.2427		.1290		-.0375	-.4498	-.2364	-.2104	-.1567	
120.000			.5717	.3828	.2469	.3120		.3720		-.0748	-.3976	-.6194	-.3668	-.2893	
140.000										-.1405					
150.000			.4697	.3106	.2421	.3338				-.4424	-.7302	-.5721	-.2995	-.1782	
151.000									.4691						
156.000								.7609							
162.000									.4959						
165.000										-.5919	-.6732	-.5407	-.3292	-.1423	
169.000								.7873							
174.000						.9210									
180.000	1.3052	.6311	.3664	.2889	.2343	.3263		.6857		-.7010	-.6644	-.4653	-.3864	-.1220	
305.000			.2727	.1545	.1384	.0263		-.3429		-.2818					
320.000			.2583	.1477	.1862	.1123		-.6770		-.1473	.0000	-.1032	-.0921	-.0037	.1107
340.000			.2711	.1585	.2176	.3639		-.5479		-.1185					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.2486	.3690	.5595	.2303	-.3470	-.2810	-.2885		-.2410	-.2367					
40.000	.1506	.2174	.3055	-.1565	-.4251	-.3384	-.2865		-.2174	-.2131					
70.000	-.0794	-.2808	-.3408	.1189	-.0400	-.2238	-.3969								
90.000	-.0517	-.2192	-.1349	.1040	-.0748	-.2103	-.3295								
105.000			.0955	.1250	-.1531	-.2624	-.3420								
110.000								-.2731							
120.000	-.1041	-.1108	.2581	.1249	-.1839	-.2828	-.2877	-.3242							
135.000			.2905	.2519	-.1924	-.1863	-.2199								
150.000	.0329	.0803	.2827	.2766	-.1251	-.0973	-.1850								
165.000	.0580		.2851		.1696	-.0045	-.2809								
180.000	.0851	.1296	.2682	.3678											
320.000	.2695	.4181	.5355	.2958	-.3016	-.2581	-.2531								

DATE 20 OCT 75

## 1A81A - PRESSURE SOURCE DATA TABULATION

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ARC11-019 1A81 LVAP(ELHL UNSEALD) ORB. FUSELAGE

(RETB09)

ALPHA( 6) = 4.254 BETA( 3) = -.002

SECTION ( 1) ORBITER FUSELAGE		DEPENDENT VARIABLE CP														
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740	
PHI																
.000	1.3165	.7342	.1833	.1706	.1733	.8049		-.3398		-.0182	-.0725	-.0799	-.0576	.0241	.1394	
20.000			.2309	.1723	.1581	.4078		-.4425		-.0403						
40.000			.3992	.2031	.1496	.1546		-.4544		-.1400	-.0881	-.1228	-.0651	-.0108	.1723	
55.000			.4689	.2596	.1628	.0963		-.1342		-.2678						
70.000			.4852	.2563	.1286	.1077		-.0352		-.1834	-.5234	-.2789	-.2344	-.1564		
90.000		.6358	.4966	.2701	.1164	.1385		.0381		-.1552	-.5591	-.3233	-.2890	-.1526		
120.000			.4848	.3006	.1590	.2447		.2826		-.2122	-.5016	-.7216	-.3009	-.1553		
140.000										-.3088						
150.000			.4382	.2966	.2080	.3047				-.5693	-.7462	-.5689	-.2961	-.1058		
151.000									.3823							
156.000								.6933								
162.000									.4291							
165.000										-.6009	-.6700	-.4705	-.3630	-.0970		
169.000								.7631								
174.000							.8943									
180.000	1.3165	.6237	.3884	.3033	.2334	.3365		.7367		-.7625	-.7145	-.4400	-.3915	-.0919		
305.000			.4299	.2566	.2043	.0984		-.2156		-.1847						
320.000			.3226	.1804	.1799	.1515		-.4700		.0149	.0000	-.0529	-.0315	-.0041	.1462	
340.000			.2580	.1574	.1772	.3883		-.3981		-.0150						
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450						
PHI																
.000	.2140	.2761	.3302	.1046	-.3187	-.2922	-.2826		-.2362	-.2365						
40.000	.1665	.2415	.2570	-.0228	-.3848	-.3068	-.2704		-.2222	-.2175						
70.000	-.0889	-.2693	-.2250	.1208	-.0703	-.2522	-.4318									
90.000	-.0495	-.2069	-.0011	.1161	-.1327	-.2359	-.3428									
105.000			.1503	.1113	-.2131	-.2925	-.3577									
110.000								-.3006								
120.000	-.0183	-.0391	.2323	.1017	-.2403	-.3224	-.3492	-.3292								
135.000			.2773	.3464	-.1935	-.2387	-.2795									
150.000	.0471	.1052	.2993	.3555	-.1019	-.1782	-.2554									
165.000	.0560		.3034		.1129	-.1136	-.2897									
180.000	.0587	.1127	.3058	.4532												
320.000	.2120	.2932	.3447	.0756	-.2898	-.2908	-.2578									

ORIGINAL PAGE IS  
OF POOR QUALITY

ARC11-019 IAB1 LVAP(ELHL UNSEALED) ORB. FUSELAGE

(RETB09)

ALPHA0( 6) = 4.256 BETA0( 4) = 4.108

## SECTION ( 1) ORBITER FUSELAGE

## DEPENDENT VARIABLE CP

X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.2875	.7415	.2223	.1589	.1632	.8237		-.5502		-.1522	-.0898	-.1132	-.1003	-.0344	.1103
20.000			.1943	.1365	.1459	.3192		-.5461		-.1889					
40.000			.2527	.1294	.1083	.0831		-.6055		-.2086	-.1327	-.1509	-.1346	.0025	.1446
55.000			.2987	.1321	.0724	.0081		-.2647		-.4016					
70.000			.3208	.1233	.0317	.0221		-.1442		-.3032	-.6331	-.3604	-.3073	-.0656	
90.000		.4085	.3498	.1420	.0155	.0492		-.0620		-.2771	-.6648	-.4274	-.3056	-.0663	
120.000			.3744	.2094	.0698	.1700		.1722		-.3436	-.6141	-.8091	-.2837	-.0833	
140.000										-.5434					
150.000			.3716	.2586	.1588	.2542				-.6574	-.7195	-.5109	-.3888	-.1012	
151.000									.2715						
156.000								.5999							
162.000									.3393						
165.000										-.6074	-.7413	-.4657	-.4207	-.1144	
169.000								.7119							
174.000							.8516								
180.000	1.2875	.5742	.3775	.2913	.2171	.3148		.7133		-.7282	-.6542	-.4800	-.3701	-.1317	
305.000			.6059	.3821	.3133	.2135		-.1079		-.1510					
320.000			.4580	.2411	.2294	.2621		-.4046		-.1453	.0000	-.0056	.0646	.0906	.2003
340.000			.3400	.1693	.1866	.4894		-.7177		.0004					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.2013	.2948	.3967	.1856	-.2388	-.2699	-.2684		-.2222	-.2249					
40.000	.2027	.3555	.4873	.2810	-.4211	-.2356	-.2677		-.2369	-.2366					
70.000	-.0394	-.2100	-.1905	.1222	-.1045	-.2753	-.4499								
90.000	.0119	-.1391	-.0258	.1188	-.1571	-.2716	-.3714								
105.000			.0791	.1201	-.2677	-.3313	-.3918								
110.000								-.3148							
120.000	.0726	.0064	.1929	.1823	-.2875	-.3884	-.4306	-.3270							
135.000			.2647	.2946	-.2363	-.3079	-.3549								
150.000	.0967	.0988	.2644	.3007	-.1542	-.2817	-.3494								
165.000	.0913		.2623		.0333	-.2134	-.3127								
180.000	.0838	.1178	.2620	.3367											
320.000	.1930	.2537	.2538	-.2680	-.2696	-.3123	-.2958								

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## IA81A - PRESSURE SOURCE DATA TABULATION

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ARC11-019 IA81 LVAP(ELHL UNSEALED) ORB. FUSELAGE

(RETB09)

ALPHA0( 6) = 4.255 BETA0( 5) = 6.174

SECTION ( 1) ORBITER FUSELAGE				DEPENDENT VARIABLE CP											
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.2351	.7428	.2532	.1683	.1600	.7947		-.5194		-.1574	-.1313	-.1761	-.1083	-.1048	.0662
20.000			.2031	.1188	.1316	.2618		-.5482		-.2341					
40.000			.2042	.0927	.0896	.0262		-.6699		-.2097	-.1395	-.1918	-.2082	.0019	.1344
55.000			.2242	.0660	.0341	-.0385		-.3145		-.4681					
70.000			.2411	.0524	-.0089	-.0173		-.1836		-.3530	-.7320	-.4175	-.3323	-.0174	
90.000		.2938	.2746	.0738	-.0261	.0077		-.1028		-.3265	-.7116	-.5153	-.2950	-.0164	
120.000			.3091	.1493	.0211	.1240		.1113		-.3987	-.6616	-.8523	-.3057	-.0482	
140.000										-.6062					
150.000			.3167	.2174	.1176	.2168				-.6811	-.7428	-.5096	-.4842	-.1030	
151.000									.2005						
156.000								.5418							
162.000									.2915						
165.000										-.6338	-.7534	-.4808	-.4344	-.1427	
169.000								.6773							
174.000						.7814									
180.000	1.2351	.5183	.3471	.2646	.1919	.2924		.6719		-.7243	-.6402	-.5377	-.3917	-.1848	
305.000			.6929	.4687	.3786	.2548		-.0589		-.0422					
320.000			.5293	.3032	.2680	.2808		-.3533		-.1494	.0000	.0819	.0547	.1316	.2147
340.000			.3857	.2000	.1964	.5012		-.6745		.0721					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1618	.2688	.3915	.1346	-.2499	-.2829	-.2818			-.2237	-.2294				
40.000	.2157	.3850	.5242	.3550	-.4259	-.2406	-.2842			-.2461	-.2441				
70.000	-.0315	-.1928	-.1641	.1438	-.0993	-.2745	-.4520								
90.000	.0180	-.1250	-.0481	.1614	-.1559	-.2846	-.3871								
105.000			.0336	.1960	-.2685	-.3372	-.4051								
110.000										-.3200					
120.000	.0722	.0163	.1442	.2758	-.3283	-.4092	-.4514			-.3285					
135.000			.2068	.3446	-.2355	-.3457	-.3933								
150.000	.0766	.0933	.2346	.2069	-.1457	-.3206	-.3974								
165.000	.0750		.2346		-.0345	-.2594	-.3180								
180.000	.0692	.1089	.2452	.2469											
320.000	.1854	.2552	.2479	-.2790	-.2745	-.3369	-.3322								

## ARC11-019 IA81 LVAP(ELHL UNSEALD) ORB. FUSELAGE

(RETB09)

ALPHA0( 7) = 6.369 BETA0 ( 1) = -4.073

SECTION ( 1) ORBITER FUSELAGE		DEPENDENT VARIABLE CP													
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.3032	.7376	.1727	.1590	.1954	.8269		-.4549		-.0594	-.0887	-.0762	-.0375	.0616	.1779
20.000			.2832	.1978	.1937	.5076		-.6483		-.0348					
40.000			.5274	.2945	.2419	.2720		-.3241		-.3809	-.0119	-.0522	.0785	.0198	.2326
55.000			.6356	.4056	.3052	.2059		-.0378		-.1499					
70.000			.6390	.3979	.2564	.2018		.0429		-.0793	-.4364	-.1390	-.1315	-.1892	
90.000		.8076	.6205	.3800	.2278	.2212		.1206		-.0250	-.4347	-.2037	-.1888	-.1872	
120.000			.5404	.3423	.1998	.2723		.3644		-.0741	-.3965	-.6173	-.4710	-.3338	
140.000										-.1458					
150.000			.4223	.2591	.1862	.2876				-.4395	-.7504	-.6231	-.3267	-.1649	
151.000									.4653						
156.000								.7557							
162.000									.4870						
165.000										-.6172	-.6993	-.5664	-.3375	-.1241	
169.000								.7797							
174.000							.9120								
180.000	1.3032	.5885	.3131	.2382	.1790	.2829		.6801		-.7240	-.6929	-.4926	-.3807	-.1042	
305.000			.2468	.1479	.1358	.0006		-.3363		-.1022					
320.000			.2119	.1328	.1688	.0837		-.4653		-.0826	.0000	-.0786	-.0553	.0149	.1215
340.000			.2207	.1375	.1984	.3145		-.4403		-.0349					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.2423	.3527	.5527	.2332	-.3566	-.2790	-.2752		-.2303	-.2319					
40.000	.1715	.2174	.3127	-.1500	-.4146	-.3289	-.2843		-.2157	-.2177					
70.000	-.0931	-.3158	-.3846	.0482	-.0735	-.2334	-.3910								
90.000	-.0657	-.2469	-.2070	.0293	-.1052	-.2226	-.3143								
105.000			.0562	.0846	-.1734	-.2847	-.3245								
110.000								-.2873							
120.000	-.1494	-.1604	.2035	.0956	-.1926	-.3012	-.3076	-.3069							
135.000			.2160	.2258	-.1987	-.2151	-.2475								
150.000	.0200	.0529	.2184	.2919	-.1211	-.1212	-.2148								
165.000	.0450		.2184		.1553	-.0186	-.2853								
180.000	.0740	.0832	.2463	.4168											
320.000	.2704	.3912	.5149	.2477	-.3162	-.2418	-.2401								

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## IAB1A - PRESSURE SOURCE DATA TABULATION

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ARC11-019 IAB1 LVAP(ELHL UNSEALD) ORB. FUSELAGE

(RETB09)

ALPHA0( 7) = 6.370 BETA0 ( 2) = -2.035

SECTION ( 1) ORBITER FUSELAGE				DEPENDENT VARIABLE CP											
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.3136	.7203	.1379	.1498	.1732	.7676		-.2796		-.0026	-.0728	-.0522	-.0258	.0583	.1680
20.000			.2185	.1640	.1631	.4415		-.4128		-.0331					
40.000			.4385	.2309	.1895	.2008		-.3742		-.1129	-.0684	-.0729	.0280	.0137	.2117
55.000			.5407	.3330	.2398	.1468		-.0800		-.1735					
70.000			.5524	.3276	.1956	.1470		.0049		-.1210	-.4093	-.2295	-.1804	-.1929	
90.000		.7148	.5445	.3222	.1672	.1756		.0845		-.0811	-.4730	-.2647	-.2434	-.1841	
120.000			.4956	.3090	.1642	.2541		.3309		-.1366	-.4537	-.6342	-.3985	-.2288	
140.000										-.2191					
150.000			.4113	.2570	.1762	.2852				-.5123	-.7576	-.5926	-.3049	-.1148	
151.000									.4280						
156.000								.7297							
162.000									.4605						
165.000										-.6164	-.6690	-.5537	-.3251	-.0972	
169.000								.7723							
174.000						.9093									
180.000	1.3136	.5812	.3317	.2483	.1820	.2937		.7094		-.7525	-.7304	-.4701	-.3414	-.0820	
305.000			.3414	.1993	.1714	.0436		-.2703		-.0280					
320.000			.2549	.1445	.1642	.1060		-.4123		.0062	.0000	-.0532	-.0326	.0212	.1470
340.000			.2035	.1354	.1854	.3285		-.3433		.0012					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.2289	.3135	.4442	.1888	-.3335	-.2796	-.2727			-.2264	-.2221				
40.000	.1964	.2327	.2456	-.2606	-.3426	-.3067	-.2615			-.2185	-.2185				
70.000	-.0996	-.3146	-.3832	.0569	-.0980	-.2526	-.4219								
90.000	-.0624	-.2436	-.1663	.0319	-.1464	-.2404	-.3486								
105.000			.0767	.0681	-.2107	-.3030	-.3656								
110.000								-.2814							
120.000	-.0867	-.1351	.1978	.0563	-.2252	-.3174	-.3509	-.3167							
135.000			.2095	.3129	-.2069	-.2381	-.2750								
150.000	.0255	.0107	.2199	.3856	-.1186	-.1729	-.2444								
165.000	.0498		.2511		.1086	-.0915	-.2922								
180.000	.0579	.0496		.4465											
320.000	.2412	.3518	.4506	.1941	-.3067	-.2537	-.2414								

## ARC11-019 IAB1 LVAP(ELHL UNSEALED) ORB. FUSELAGE

(RETB09)

ALPHA( 7) = 6.369 BETA( 3) = .015

## SECTION ( 1) ORBITER FUSELAGE

## DEPENDENT VARIABLE CP

X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.3147	.7147	.1401	.1592	.1724	.7439		-.2824		.0086	-.0572	-.0484	-.0178	.0576	.1626
20.000			.1879	.1595	.1541	.3818		-.3397		-.0280					
40.000			.3702	.1957	.1582	.1400		-.4210		-.0374	-.0863	-.1019	-.0364	.0312	.1890
55.000			.4644	.2653	.1808	.0885		-.1265		-.1833					
70.000			.4792	.2561	.1332	.0995		-.0320		-.1705	-.4006	-.2783	-.2215	-.1563	
90.000		.6133	.4812	.2551	.1075	.1291		.0438		-.1373	-.5326	-.3114	-.2850	-.1536	
120.000			.4554	.2720	.1298	.2265		.2896		-.1970	-.5032	-.6468	-.3489	-.1519	
140.000										-.2932					
150.000			.3973	.2544	.1642	.2742				-.5658	-.7592	-.5870	-.2911	-.0894	
151.000									.3806						
156.000								.6911							
162.000									.4213						
165.000										-.6119	-.6922	-.4833	-.3107	-.0756	
169.000								.7577							
174.000							.8836								
180.000	1.3147	.5772	.3461	.2615	.1907	.3086		.7269		-.7745	-.7253	-.4532	-.3306	-.0746	
305.000			.4334	.2669	.2299	.1063		-.1989		-.0111					
320.000			.3051	.1768	.1867	.1543		-.3956		.0651	.0000	-.0195	-.0046	.0296	.1683
340.000			.2257	.1521	.1795	.3788		-.3387		.0095					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.2299	.2908	.3454	.1231	-.3093	-.2779	-.2664		-.2265	-.2225					
40.000	.2025	.2559	.2840	-.0165	-.3741	-.2826	-.2542		-.2152	-.2162					
70.000	-.1050	-.3053	-.3575	.0766	-.0995	-.2583	-.4398								
90.000	-.0678	-.2315	-.1147	.0472	-.1610	-.2502	-.3551								
105.000			.0907	.0661	-.2309	-.3110	-.3754								
110.000									-.3142						
120.000	-.0370	-.0917	.1828	.0734	-.2417	-.3402	-.3768		-.3243						
135.000			.2169	.3287	-.1988	-.2620	-.3040								
150.000	.0452	.0209	.2597	.3726	-.1076	-.2058	-.2769								
165.000	.0560		.2742		.0916	-.1412	-.2881								
180.000	.0597	.0472	.2840	.4888											
320.000	.2251	.2999	.3390	.0508	-.2748	-.2769	-.2482								

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## IABIA - PRESSURE SOURCE DATA TABULATION

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ARC11-019 IAB1 LVAP(ELHL UNSEALD) ORB. FUSELAGE

(RETB09)

ALPHA0 ( 7 ) = 6.366 BETA0 ( 4 ) = 2.074

SECTION ( 1 ) ORBITER FUSELAGE				DEPENDENT VARIABLE CP											
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.3003	.7067	.1518	.1570	.1545	.7623		-.3965		-.0014	-.0536	-.0628	-.0392	.0330	.1445
20.000			.1484	.1513	.1494	.3224		-.3820		-.0173					
40.000			.2808	.1594	.1302	.0941		-.4918		-.0524	-.0868	-.1143	-.0740	.0263	.1661
55.000			.3684	.2039	.1302	.0330		-.1976		-.2124					
70.000			.3922	.1921	.0830	.0452		-.0970		-.2158	-.4139	-.3096	-.2591	-.1172	
90.000		.5030	.4111	.1996	.0536	.0765		-.0132		-.1942	-.5801	-.3503	-.3175	-.1071	
120.000			.4073	.2330	.0869	.1823		.2358		-.2660	-.5591	-.7103	-.2965	-.0987	
140.000										-.4286					
150.000			.3660	.2390	.1429	.2484				-.6204	-.7599	-.5668	-.2850	-.0773	
151.000									.3304						
156.000								.6462							
162.000									.3837						
165.000										-.6166	-.7236	-.4739	-.3194	-.0800	
169.000								.7370							
174.000							.8661								
180.000	1.3003	.5508	.3430	.2604	.1801	.2880		.7225		-.7582	-.7206	-.4661	-.3461	-.0837	
305.000			.5287	.3282	.2722	.1574		-.1456		-.1207					
320.000			.3936	.1973	.1992	.1891		-.4214		.0758	.0000	-.0007	.0428	.0559	.1942
340.000			.2684	.1410	.1634	.4271		-.4075		-.0062					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.2233	.2913	.3638	.1821	-.2524	-.2598	-.2472		-.2063	-.2079					
40.000	.2118	.3062	.4123	.1687	-.3895	-.2288	-.2398		-.2079	-.2196					
70.000	-.1003	-.2844	-.2770	.1023	-.0999	-.2689	-.4539								
90.000	-.0547	-.2128	-.0433	.0770	-.1657	-.2601	-.3646								
105.000			.1081	.0652	-.2443	-.3249	-.3856								
110.000								-.3286							
120.000	.0065	-.0295	.1756	.0831	-.2652	-.3646	-.4044	-.3286							
135.000			.2502	.3423	-.1984	-.2872	-.3344								
150.000	.0625	.0619	.2792	.3946	-.1276	-.2587	-.3144								
165.000	.0646		.2775		.0543	-.1985	-.2969								
180.000	.0588	.0714	.2526	.4419											
320.000	.2129	.2606	.2529	-.1782	-.2986	-.2875	-.2658								

ORIGINAL PAGE 1  
OF 2

ORIGINAL PAGE IS  
OF POOR QUALITY



ARC11-019 IAB1 LVAP(ELHL UNSEALD) ORB. FUSELAGE

(RET809)

ALPHA( 7) = 6.365 BETA( 5) = 4.127

SECTION ( 1) ORBITER FUSELAGE				DEPENDENT VARIABLE CP											
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.2831	.7497	.1984	.1484	.1483	.7915		-.5278		-.1128	-.0736	-.0928	-.0638	-.0145	.1224
20.000			.1671	.1295	.1331	.3066		-.4720		-.1084					
40.000			.2259	.1265	.1024	.0718		-.5983		-.1497	-.0932	-.1352	-.1080	.0136	.1568
55.000			.2764	.1319	.0757	-.0089		-.2641		-.3138					
70.000			.3005	.1215	.0312	-.0041		-.1436		-.2946	-.4839	-.3370	-.2932	-.0631	
90.000		.3788	.3280	.1319	.0096	.0266		-.0588		-.2659	-.6461	-.3854	-.3196	-.0570	
120.000			.3438	.1835	.0473	.1436		.1825		-.3301	-.6180	-.7957	-.2825	-.0607	
140.000										-.5270					
150.000			.3297	.2222	.1189	.2196				-.6563	-.7470	-.5268	-.3119	-.0709	
151.000									.2682						
156.000								.5974							
162.000									.3337						
165.000										-.6191	-.7582	-.4802	-.3869	-.0884	
169.000								.7088							
174.000						.8211									
180.000	1.2831	.5282	.3338	.2471	.1713	.2769		.7105		-.7365	-.6729	-.4998	-.3744	-.1093	
305.000			.6228	.4022	.3400	.2125		-.1078		-.1226					
320.000			.4750	.2511	.2439	.2544		-.3844		-.0996	.0000	.0327	.0987	.1130	.2236
340.000			.3389	.1567	.1764	.4808		-.7087		.0174					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.2071	.2886	.4077	.1935	-.2192	-.2600	-.2517		-.2078	-.2101					
40.000	.2330	.3379	.4721	.2515	-.3827	-.2189	-.2460		-.2181	-.2208					
70.000	-.0695	-.2352	-.2211	.0977	-.1207	-.2857	-.4579								
90.000	-.0303	-.1684	-.0333	.0933	-.1723	-.2837	-.3751								
105.000			.0975	.0781	-.2728	-.3501	-.4038								
110.000								-.3428							
120.000	.0574	-.0144	.1808	.1359	-.2891	-.3950	-.4449	-.3323							
135.000			.2677	.3116	-.2331	-.3244	-.3793								
150.000	.0912	.0756	.2694	.3348	-.1770	-.2977	-.3597								
165.000	.0760		.2400		.0038	-.2430	-.3198								
180.000	.0652	.0877	.2296	.3561											
320.000	.1995	.2658	.2623	-.2542	-.2624	-.2889	-.2863								

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## 1A81A - PRESSURE SOURCE DATA TABULATION

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ARC11-019 1A81 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB10) ( 17 OCT 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 976.0000 IN. XT  
 LREF = 1297.0000 INCHES YMRP = .0000 IN. YT  
 BREF = 1297.0000 INCHES ZMRP = 400.0000 IN. ZT  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

MACH = 1.100 RN/FT = 2.250  
 ELV-1B = 8.000 ELV-0B = 4.000  
 RUDDER = .000 SPDBRK = .000

BETA0 ( 1 ) = .019 ALPHA0( 1 ) = -6.200

SECTION ( 1 ) ORBITER FUSELAGE		DEPENDENT VARIABLE CP													
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.3226	.7380	.3767	.3350	.3360	.9333		-.4250		-.0760	-.1845	-.1551	-.1817	-.0654	.0490
20.000			.3891	.3293	.3185	.4784		-.4024		-.0473					
40.000			.4725	.3229	.2871	.2680		-.4388		-.4361	-.1148	-.2004	-.3263	-.0644	.0922
55.000			.5327	.3502	.2794	.2120		-.0956		-.2869					
70.000			.5682	.3647	.2723	.2233		.0104		-.1894	-.5941	-.3360	-.2462	-.1151	
90.000		.7470	.6092	.3970	.2790	.2451		.0631		-.1742	-.5339	-.5473	-.2162	-.1178	
120.000			.6647	.4995	.3802	.3979		.3014		-.1879	-.4382	-.6849	-.2716	-.1367	
140.000										-.3046					
150.000			.6815	.5626	.4821	.5074				-.4493	-.5406	-.3419	-.2824	-.1440	
151.000									.4455						
156.000								.7476							
162.000									.5147						
165.000										-.4716	-.4879	-.2581	-.2837	-.1417	
169.000								.8486							
174.000							.9773								
180.000	1.3226	.8816	.6629	.5788	.5193	.5517		.8364		-.4743	-.5660	-.2391	-.2804	-.1430	
305.000			.5097	.3650	.3133	.2097		-.1853		-.2991					
320.000			.4456	.3239	.3201	.2809		-.5003		-.0830	.0000	-.1574	-.2097	-.0707	.0591
340.000			.4297	.3256	.3392	.4934		-.4628		-.0292					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1111	.1855	.2754	.0799	-.3670	-.3400	-.3269		-.2766	-.3062					
40.000	.0463	.1270	.1626	-.1578	-.3856	-.3457	-.3205		-.2766	-.2740					
70.000	.0523	.0902	.2244	.2714	.0230	-.1784	-.3401								
90.000	.0672	.1382	.2748	.2913	-.0470	-.1544	-.2464								
105.000			.3338	.2265	-.1311	-.1808	-.2633								
110.000								-.4260							
120.000	.0769	.2153	.3707	.1622	-.1973	-.2187	-.2704	-.3462							
135.000			.4682	.4796	-.0960	-.1071	-.1510								
150.000	.0628	.2764	.4875	.5397	.0271	-.0384	-.1348								
165.000	.0621		.4899		.2265	.0197	-.3083								
180.000	.0601	.2896	.4929	.6739											
320.000	.0709	.1694	.2612	-.0473	-.3264	-.3191	-.3140								

ARC11-019 IAB1 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB10)

BETA0 ( 1 ) = .001 ALPHA0 ( 2 ) = -4.091

## SECTION ( 1 ) ORBITER FUSELAGE

## DEPENDENT VARIABLE CP

X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.3120	.7445	.3636	.3099	.3127	.9187		-.4308		-.0752	-.1820	-.1370	-.1562	-.0457	.0655
20.000			.3787	.3042	.2962	.4691		-.4181		-.0432					
40.000			.4645	.3011	.2656	.2562		-.4379		-.3440	-.1137	-.1614	-.3035	-.0461	.1110
55.000			.5232	.3311	.2579	.1977		-.0960		-.2734					
70.000			.5517	.3435	.2448	.2125		.0081		-.1788	-.5865	-.3292	-.2617	-.1111	
90.000		.7215	.5854	.3742	.2562	.2380		.0654		-.1607	-.5376	-.5321	-.2243	-.1164	
120.000			.6321	.4657	.3460	.3786		.3012		-.1901	-.4420	-.6862	-.2454	-.1198	
140.000										-.2976					
150.000			.6338	.5168	.4365	.4792				-.4741	-.5679	-.3902	-.2996	-.1272	
151.000									.4370						
156.000								.7352							
162.000									.5026						
165.000										-.4900	-.5139	-.2944	-.3043	-.1255	
169.000								.8309							
174.000						.9575									
180.000	1.3120	.8267	.6098	.5285	.4701	.5179		.8167		-.5204	-.5875	-.2752	-.3027	-.1255	
305.000			.5020	.3480	.2923	.2006		-.1856		-.2831					
320.000			.4364	.3033	.2950	.2740		-.4975		-.0373	.0000	-.1285	-.1865	-.0503	.0786
340.000			.4166	.3009	.3137	.4877		-.4655		-.0373					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1309	.2020	.2777	.0811	-.3618	-.3231	-.3156		-.2800	-.2912					
40.000	.0685	.1538	.1738	-.1163	-.3769	-.3299	-.3062		-.2693	-.2630					
70.000	.0304	-.0743	.1664	.2368	.0070	-.1834	-.3396								
90.000	.0571	.0056	.2302	.2334	-.0601	-.1619	-.2596								
105.000			.2939	.2128	-.1440	-.1898	-.2741								
110.000								-.3849							
120.000	.0652	.1317	.3327	.0960	-.1922	-.2349	-.2739	-.3326							
135.000			.4180	.4158	-.1090	-.1370	-.1680								
150.000	.0726	.2025	.4416	.4725	.0031	-.0759	-.1556								
165.000	.0773		.4429		.2101	-.0134	-.2979								
180.000	.0773	.2173	.4453	.6107											
320.000	.1012	.1873	.2681	-.0264	-.2938	-.3163	-.3009								

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## IABIA - PRESSURE SOURCE DATA TABULATION

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ARC11-019 IAB1 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB10)

BETA0 ( 1 ) = -.016 ALPHA0( 3 ) = -2.000

SECTION ( 1 ) ORBITER FUSELAGE				DEPENDENT VARIABLE CP											
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.3080	.7485	.3267	.2625	.2661	.9027		-.4450		-.0752	-.1526	-.1367	-.1310	-.0330	.0815
20.000			.3432	.2635	.2473	.4589		-.4771		-.0729					
40.000			.4408	.2679	.2167	.2389		-.4404		-.1925	-.0952	-.1370	-.2680	-.0404	.1314
55.000			.5023	.3025	.2136	.1771		-.1005		-.2724					
70.000			.5295	.3126	.2042	.1858		-.0005		-.1814	-.5852	-.3058	-.2626	-.1216	
90.000		.6932	.5570	.3426	.2123	.2106		.0608		-.1615	-.5440	-.4866	-.2371	-.1283	
120.000			.5883	.4206	.3042	.3477		.2980		-.1910	-.4502	-.6916	-.2284	-.1239	
140.000										-.2949					
150.000			.5773	.4609	.3824	.4362				-.4972	-.6044	-.4364	-.3227	-.1144	
151.000									.4189						
156.000								.7214							
162.000									.4789						
165.000										-.5097	-.5467	-.3350	-.3338	-.1093	
169.000								.8099							
174.000							.9387								
180.000	1.3080	.7736	.5522	.4711	.4137	.4736		.7941		-.5917	-.6122	-.3118	-.3348	-.1090	
305.000			.4779	.3102	.2566	.1739		-.1874		-.2507					
320.000			.4169	.2614	.2553	.2504		-.5036		-.0524	.0000	-.1031	-.1492	-.0338	.0980
340.000			.3866	.2527	.2716	.4712		-.5262		-.0271					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1526	.2189	.2951	.0864	-.3675	-.3238	-.3035		-.2524	-.2709					
40.000	.0953	.1795	.2063	-.0628	-.4072	-.3272	-.3055		-.2484	-.2494					
70.000	.0066	-.1464	.0953	.2059	-.0183	-.1914	-.3521								
90.000	.0358	-.0742	.1686	.1896	-.0654	-.1678	-.2695								
105.000			.2507	.1840	-.1466	-.2056	-.2809								
110.000								-.3593							
120.000	.0560	.0798	.3184	.1093	-.1742	-.2458	-.2844	-.3303							
135.000			.3597	.3528	-.1146	-.1500	-.1902								
150.000	.0759	.1589	.3846	.4178	-.0229	-.0903	-.1784								
165.000	.0796		.3910		.1883	-.0333	-.2952								
180.000	.0806	.1744	.3961	.5501											
320.000	.1302	.2282	.2914	.0184	-.2908	-.3224	-.2925								

ARC11-019 IA81 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB10)

BETA0 (1) = -.022 ALPHA0(4) = .085

SECTION (1) ORBITER FUSELAGE		DEPENDENT VARIABLE CP													
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.3229	.7463	.2740	.2199	.2162	.8865		-.4222		-.0526	-.1004	-.1113	-.1066	-.0159	.1042
20.000			.3018	.2206	.1990	.4456		-.5579		-.0439					
40.000			.4189	.2287	.1684	.2143		-.4454		-.1705	-.1042	-.1315	-.1689	-.0389	.1501
55.000			.4861	.2721	.1728	.1473		-.1069		-.2692					
70.000			.5102	.2819	.1570	.1558		-.0105		-.1806	-.5855	-.2905	-.2394	-.1339	
90.000		.6670	.5345	.3078	.1681	.1810		.0548		-.1581	-.5497	-.4153	-.2471	-.1322	
120.000			.5493	.3738	.2480	.3133		.2913		-.1983	-.4610	-.7061	-.2266	-.1282	
140.000										-.3057					
150.000			.5280	.4021	.3201	.3898				-.5244	-.6645	-.4817	-.3273	-.1017	
151.000									.4045						
156.000								.7070							
162.000									.4615						
165.000										-.5379	-.5825	-.3792	-.3600	-.0957	
169.000								.7936							
174.000							.9206								
180.000	1.3229	.7175	.4934	.4102	.3524	.4269		.7710		-.6611	-.6429	-.3543	-.3624	-.0936	
305.000			.4625	.2802	.2228	.1469		-.1965		-.2348					
320.000			.3809	.2176	.2102	.2197		-.5054		-.0812	.0000	-.0806	-.0877	-.0212	.1184
340.000			.3385	.2011	.2211	.4470		-.5121		-.0039					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1784	.2441	.3012	.0857	-.3644	-.3186	-.2973		-.2539	-.2562					
40.000	.1197	.2111	.2287	-.0248	-.4352	-.3320	-.3067		-.2466	-.2509					
70.000	-.0242	-.1776	-.0238	.1744	-.0293	-.2043	-.3651								
90.000	.0142	-.1162	.0888	.1602	-.0775	-.1844	-.2868								
105.000			.1835	.1461	-.1736	-.2252	-.2983								
110.000								-.3664							
120.000	.0412	.0379	.2648	.1838	-.1901	-.2605	-.2912	-.3270							
135.000			.3052	.3804	-.0862	-.1660	-.2166								
150.000	.0715	.1478	.3187	.4141	-.0276	-.1093	-.1964								
165.000	.0756		.3292		.1616	-.0465	-.2871								
180.000	.0776	.1582	.3406	.4920											
320.000	.1669	.2594	.3170	.0510	-.3030	-.3344	-.2814								

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ARC11-019 IA81 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB10)

BETA0 ( 1 ) = -.019 ALPHA0( 5 ) = 2.189

## SECTION ( 1 ) ORBITER FUSELAGE

## DEPENDENT VARIABLE CP

X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.3218	.7460	.2358	.1886	.1949	.8606		-.3335		-.0399	-.0771	-.0930	-.0769	.0047	.1230
20.000			.2744	.1903	.1756	.4328		-.5248		-.0372					
40.000			.4048	.2139	.1517	.1905		-.4549		-.1366	-.0967	-.1282	-.0833	-.0351	.1615
55.000			.4757	.2618	.1561	.1251		-.1206		-.2715					
70.000			.4953	.2665	.1331	.1317		-.0223		-.1853	-.5847	-.2823	-.2306	-.1434	
90.000		.6507	.5129	.2864	.1348	.1610		.0450		-.1579	-.5559	-.3455	-.2579	-.1386	
120.000			.5163	.3363	.2007	.2830		.2849		-.2054	-.4800	-.7105	-.2469	-.1349	
140.000										-.3052					
150.000			.4819	.3461	.2681	.3494				-.5481	-.7079	-.5194	-.3052	-.1005	
151.000									.3913						
156.000								.6999							
162.000									.4424						
165.000										-.5677	-.6266	-.4173	-.3750	-.0934	
169.000								.7776							
174.000						.9103									
180.000	1.3218	.6700	.4406	.3551	.2960	.3831		.7540		-.7170	-.6801	-.3923	-.3862	-.0907	
305.000			.4461	.2650	.2055	.1236		-.2051		-.2054					
320.000			.3515	.1922	.1939	.1869		-.5035		-.0511	.0000	-.0587	-.0381	-.0137	.1328
340.000			.3050	.1760	.1980	.4182		-.4416		-.0013					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1973	.2576	.3084	.0894	-.3438	-.3041	-.2864		-.2454	-.2464					
40.000	.1412	.2295	.2446	-.0075	-.4231	-.3264	-.2908		-.2391	-.2344					
70.000	-.0589	-.2181	-.1469	.1587	-.0454	-.2180	-.3993								
90.000	-.0218	-.1627	.0272	.1583	-.1068	-.2092	-.3124								
105.000			.1447	.1560	-.1956	-.2578	-.3256								
110.000								-.3312							
120.000	.0147	.0016	.2328	.1693	-.2244	-.2925	-.3180	-.3193							
135.000			.2830	.3286	-.1639	-.2018	-.2537								
150.000	.0620	.1444	.2904	.3546	-.0413	-.1420	-.2290								
165.000	.0694		.3066		.1411	-.0818	-.2875								
180.000	.0714	.1353	.3137	.4451											
320.000	.1914	.2750	.3276	.0643	-.2896	-.3181	-.2716								

ORIGINAL PAGE IS  
OF POOR QUALITY

ARC11-019 IAB1 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB10)

BETA0 ( 1 ) = -.014 ALPHA0( 6 ) = 4.274

SECTION ( 1 ) ORBITER FUSELAGE				DEPENDENT VARIABLE CP											
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.3169	.7316	.1841	.1656	.1731	.7971		-.3399		-.0153	-.0675	-.0756	-.0518	.0280	.1414
20.000			.2206	.1666	.1538	.4033		-.4364		-.0356					
40.000			.3853	.1957	.1484	.1516		-.4554		-.1290	-.0854	-.1214	-.0637	-.0065	.1716
55.000			.4663	.2508	.1609	.0955		-.1347		-.2643					
70.000			.4825	.2508	.1223	.1044		-.0370		-.1824	-.5319	-.2773	-.2314	-.1503	
90.000		.6307	.4925	.2657	.1125	.1348		.0367		-.1527	-.5570	-.3194	-.2849	-.1489	
120.000			.4794	.2988	.1557	.2475		.2846		-.2122	-.4990	-.7184	-.2926	-.1452	
140.000										-.3095					
150.000			.4336	.2954	.2076	.3070				-.5685	-.7418	-.5625	-.2909	-.1020	
151.000									.3841						
156.000								.6935							
162.000									.4297						
165.000										-.5967	-.6662	-.4600	-.3582	-.0908	
169.000								.7663							
174.000						.8934									
180.000	1.3169	.6186	.3853	.3036	.2363	.3401		.7395		-.7594	-.7092	-.4313	-.3863	-.0901	
305.000			.4329	.2579	.2024	.1013		-.2058		-.1800					
320.000			.3265	.1768	.1741	.1567		-.4750		-.0034	.0000	-.0471	-.0258	-.0001	.1499
340.000			.2583	.1562	.1720	.3924		-.4012		-.0139					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.2149	.2751	.3290	.1047	-.3180	-.2892	-.2846		-.2413	-.2380					
40.000	.1580	.2471	.2589	-.0111	-.3826	-.3092	-.2707		-.2237	-.2217					
70.000	-.0871	-.2685	-.2861	.1189	-.0761	-.2442	-.4316								
90.000	-.0471	-.2062	-.0314	.1020	-.1366	-.2378	-.3371								
105.000			.1307	.1026	-.2141	-.2950	-.3534								
110.000								-.2910							
120.000	-.0112	-.0594	.2244	.0830	-.2436	-.3283	-.3578	-.3191							
135.000			.2661	.3235	-.1972	-.2449	-.2853								
150.000	.0504	.0681	.2877	.3384	-.1004	-.1802	-.2565								
165.000	.0585		.2945		.1134	-.1172	-.2883								
180.000	.0612	.0949	.3009	.4501											
320.000	.2125	.2908	.3368	.0613	-.2838	-.2910	-.2571								

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## IABIA - PRESSURE SOURCE DATA TABULATION

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ARC11-019 IAB1 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB10)

BETA0 ( 1 ) = .001 ALPHA0( 7 ) = 6.376

## SECTION ( 1 ) ORBITER FUSELAGE

## DEPENDENT VARIABLE CP

X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.3121	.7171	.1410	.1595	.1696	.7329		-.2973		.0107	-.0582	-.0514	-.0182	.0585	.1644
20.000			.1942	.1598	.1565	.3797		-.3427		-.0267					
40.000			.3712	.1986	.1602	.1413		-.4223		-.0375	-.0876	-.1042	-.0357	.0333	.1904
55.000			.4615	.2679	.1824	.0859		-.1262		-.1882					
70.000			.4742	.2561	.1335	.0961		-.0338		-.1707	-.3991	-.2797	-.2213	-.1573	
90.000		.6180	.4807	.2615	.1080	.1264		.0461		-.1367	-.5380	-.3111	-.2849	-.1539	
120.000			.4529	.2753	.1226	.2250		.2906		-.1996	-.5052	-.6367	-.3488	-.1526	
140.000										-.2966					
150.000			.3959	.2565	.1627	.2739				-.5692	-.7619	-.5838	-.2906	-.0883	
151.000									.3826						
156.000								.6919							
162.000									.4221						
165.000										-.6162	-.6939	-.4822	-.3101	-.0755	
169.000								.7566							
174.000						.8819									
180.000	1.3121	.5757	.3424	.2605	.1879	.3049		.7259		-.7792	-.7284	-.4529	-.3253	-.0745	
305.000			.4313	.2663	.2233	.1012		-.1960		-.1154					
320.000			.3131	.1763	.1872	.1447		-.3956		.0558	.0000	-.0223	-.0024	.0296	.1681
340.000			.2265	.1480	.1811	.3831		-.3454		.0033					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.2318	.2915	.3464	.1193	-.3070	-.2784	-.2635		-.2247	-.2234					
40.000	.1745	.2574	.2787	-.0202	-.3718	-.2821	-.2501		-.2131	-.2135					
70.000	-.1032	-.3010	-.3618	.0759	-.0983	-.2575	-.4395								
90.000	-.0644	-.2288	-.1071	.0402	-.1603	-.2507	-.3505								
105.000			.0907	.0627	-.2318	-.3138	-.3707								
110.000								-.2885							
120.000	-.0341	-.0946	.1817	.0727	-.2419	-.3374	-.3731	-.3148							
135.000			.2198	.3233	-.2038	-.2602	-.3023								
150.000	.0478	.0146	.2477	.3708	-.1111	-.2032	-.2760								
165.000	.0593		.2656		.0872	-.1378	-.2881								
180.000	.0633	.0375	.2700	.4885											
320.000	.2268	.2976	.3353	.0535	-.2568	-.2737	-.2416								



ARC11-019 IAB1 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB11) ( 02 OCT 74 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 976.0000 IN. XT  
 LREF = 1297.0000 INCHES YMRP = .0000 IN. YT  
 BREF = 1297.0000 INCHES ZMRP = 400.0000 IN. ZT  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

MACH = 1.250 RN/FT = 2.250  
 ELV-1B = 8.000 ELV-0B = 4.000  
 RUDDER = .000 SPDBRK = .000

ALPHA0 ( 1 ) = -6.258 BETA0 ( 1 ) = -4.078

## SECTION ( 1 ) ORBITER FUSELAGE

## DEPENDENT VARIABLE CP

X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.3541	.8279	.4359	.3780	.3950	.9886		-.2283		-.1514	-.0193	-.1280	-.2494	-.2978	-.0752
20.000			.4864	.3935	.3781	.6465		-.2722		-.1835					
40.000			.6440	.4285	.3625	.4212		-.1787		-.2393	-.2586	-.0368	-.1094	-.1250	-.1748
55.000			.7411	.5210	.4118	.3651		.1258		-.0391					
70.000			.7773	.5489	.4175	.3742		.2149		.0485	-.3367	-.1653	-.1075	-.0408	
90.000		.9782	.8023	.5820	.4363	.4041		.2768		.0780	-.2867	-.2790	-.1218	-.0497	
120.000			.8078	.6357	.5138	.5371		.5140		.0836	-.1866	-.4365	-.1555	-.0658	
140.000										.0552					
150.000			.7547	.6134	.5472	.5932				-.2031	-.4183	-.2488	-.1571	-.1096	
151.000									.6415						
156.000								.9086							
162.000									.6868						
165.000										-.2895	-.3182	-.2393	-.1644	-.1293	
169.000								.9520							
174.000						1.0694									
180.000	1.3541	.9025	.6637	.5828	.5366	.5878		.8721		-.3962	-.3638	-.1818	-.1847	-.1557	
305.000			.4330	.3273	.3125	.2614		-.1228		-.2407					
320.000			.4317	.3352	.3625	.3213		-.4433		-.1748	-.1809	-.1081	-.2117	-.0985	-.0103
340.000			.4603	.3527	.3962	.5471		-.3323		-.1025					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.0998	.2965	.5600	.2408	-.2829	-.2728	-.2877			-.2239	-.2286				
40.000	-.0253	.1030	.2333	-.1811	-.3801	-.2775	-.3271			-.2208	-.2089				
70.000	-.0138	-.0953	-.0568	.2020	.0961	-.0414	-.1776								
90.000	-.0075	-.0517	.1072	.1804	.0691	-.0147	-.0914								
105.000			.2356	.1781	-.0068	-.0637	-.0971								
110.000															
120.000	-.0326	-.0056	.3484	.2000	-.0106	-.0676	-.0838		-.2734						
135.000			.3921	.3846	.0393	.0536	.0145		-.2018						
150.000	-.0772	-.0225	.3899	.4119	.1566	.1548	.0448								
165.000	-.0816		.3759		.4464	.2483	-.2235								
180.000	-.0924	-.0508	.3676	.4815											
320.000	.0088	.3236	.4820	.2975	-.2264	-.2584	-.2559								

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## IABIA - PRESSURE SOURCE DATA TABULATION

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ARC11-019 IAB1 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB11)

ALPHA0( 1) = -6.244 BETA0( 2) = -2.027

## SECTION ( 1) ORBITER FUSELAGE

## DEPENDENT VARIABLE CP

X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.3865	.8307	.4253	.3791	.4007	.9705		-.2402		-.1581	-.0278	-.0485	-.1932	-.0893	-.0153
20.000			.4615	.3855	.3823	.6283		-.2748		-.2806					
40.000			.5920	.4004	.3534	.4111		-.2287		-.2933	-.2492	-.0794	-.1322	-.1961	-.1540
55.000			.6688	.4658	.3687	.3300		.0766		-.0910					
70.000			.7044	.4858	.3677	.3377		.1682		-.0007	-.3779	-.2180	-.1392	-.0613	
90.000		.8860	.7313	.5179	.3823	.3621		.2264		.0219	-.3298	-.3499	-.1449	-.0750	
120.000			.7575	.5894	.4698	.5003		.4637		.0200	-.2368	-.4796	-.1920	-.0918	
140.000										-.0246					
150.000			.7329	.6030	.5301	.5798				-.2460	-.4145	-.2577	-.1691	-.1142	
151.000									.5980						
156.000								.8702							
162.000									.6517						
165.000										-.2909	-.3155	-.2187	-.1783	-.1292	
169.000								.9364							
174.000						1.0632									
180.000	1.3865	.9013	.6791	.5979	.5417	.5981		.8954		-.3798	-.4008	-.1592	-.1875	-.1486	
305.000			.5010	.3709	.3109	.2835		-.0894		-.1973					
320.000			.4693	.3541	.3739	.3669		-.3970		-.2661	-.1587	-.0941	-.1805	-.0942	-.0261
340.000			.4690	.3652	.4041	.5824		-.3505		-.0721					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.0656	.2463	.4671	.1659	-.3338	-.2992	-.2868		-.2378	-.2450					
40.000	-.0073	.1047	.2142	-.2153	-.3275	-.2992	-.3081		-.2259	-.2175					
70.000	-.0331	-.0840	.0579	.1901	.0724	-.0656	-.1975								
90.000	-.0194	-.0429	.1685	.1802	.0263	-.0347	-.1069								
105.000			.2581	.1310	-.0462	-.0894	-.1228								
110.000								-.2896							
120.000	-.0337	.0026	.3146	.1261	-.0452	-.1171	-.1460	-.2156							
135.000			.3931	.3842	.0228	.0049	-.0294								
150.000	-.0595	-.0206	.4048	.4252	.1436	.0949	.0049								
165.000	-.0639		.4026		.3975	.1762	-.2448								
180.000	-.0674	-.0387	.3972	.5434											
320.000	.0131	.2686	.4214	.2202	-.2633	-.2391	-.2553								

ORIGINAL PAGE IS  
OF POOR QUALITY

ARC11-019 1A81 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB11)

ALPHA0 ( 1 ) = -6.209 BETA0 ( 3 ) = .049

SECTION ( 1 ) ORBITER FUSELAGE				DEPENDENT VARIABLE CP											
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.3830	.8287	.4274	.3799	.3949	.8757		-.2539		-.1203	-.0520	-.0290	-.1055	-.1065	-.0132
20.000			.4430	.3742	.3775	.5920		-.2532		-.1492					
40.000			.5387	.3761	.3362	.3814		-.2678		-.2755	-.1239	-.0673	-.1652	-.2954	-.0609
55.000			.6001	.4100	.3274	.3055		.0399		-.1311					
70.000			.6331	.4240	.3163	.3069		.1350		-.0423	-.4148	-.2724	-.1652	-.0757	
90.000		.8006	.6667	.4557	.3270	.3236		.1921		-.0255	-.3753	-.3876	-.1569	-.0884	
120.000			.7094	.5439	.4218	.4624		.4182		-.0450	-.2893	-.5120	-.2731	-.1106	
140.000										-.1730					
150.000			.7127	.5933	.5135	.5612				-.2972	-.3903	-.2591	-.1906	-.1184	
151.000									.5542						
156.000								.8366							
162.000									.6183						
165.000										-.2949	-.3603	-.1706	-.1874	-.1254	
169.000								.9273							
174.000						1.0451									
180.000	1.3830	.9021	.6897	.6081	.5465	.6041		.9165		-.3679	-.4001	-.1477	-.1824	-.1324	
305.000			.5759	.4171	.3670	.3088		-.0426		-.1478					
320.000			.5086	.3699	.3773	.3973		-.3247		-.1981	-.1619	-.0316	-.1909	-.0790	-.0186
340.000			.4864	.3667	.3994	.6064		-.3345		.0283					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.0889	.2136	.3291	.1612	-.3150	-.2748	-.2700			-.2422	-.2556				
40.000	.0332	.1506	.2050	-.1367	-.3144	-.2742	-.2687			-.2256	-.2250				
70.000	-.0332	-.0577	.1225	.2064	.0732	-.0801	-.2217								
90.000	-.0211	-.0126	.1977	.1969	.0100	-.0433	-.1184								
105.000			.2396	.0759	-.0630	-.1040	-.1416								
110.000								-.3000							
120.000	-.0456	.0334	.2964	.0827	-.0913	-.1753	-.2036	-.2364							
135.000			.3987	.3836	-.0043	-.0459	-.0825								
150.000	-.0603	-.0193	.4175	.4347	.1199	.0351	-.0481								
165.000	-.0564		.4206		.3603	.1143	-.2431								
180.000	-.0580	-.0269	.4229	.5735											
320.000	.0689	.1946	.3124	.0072	-.2446	-.2579	-.2825								

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ARC11-019 IAB1 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB11)

ALPHA0(1) = -6.193 BETA0(4) = 2.114

## SECTION (1) ORBITER FUSELAGE

## DEPENDENT VARIABLE CP

X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.3678	.8169	.4177	.3657	.3745	.9782		-.2851		-.0675	-.1096	-.0561	-.0545	-.1314	-.0207
20.000			.4151	.3521	.3542	.5491		-.2938		-.1192					
40.000			.4792	.3394	.3145	.3412		-.3141		-.3365	-.0940	-.0806	-.2077	-.2578	-.0045
55.000			.5255	.3492	.2834	.2713		-.0050		-.1811					
70.000			.5543	.3565	.2643	.2724		.0944		-.0875	-.4595	-.3257	-.1962	-.0872	
90.000		.6954	.5925	.3861	.2669	.2833		.1499		-.0757	-.4232	-.4381	-.1873	-.1018	
120.000			.6495	.4876	.3643	.4200		.3587		-.1122	-.3362	-.5564	-.3284	-.1384	
140.000										-.2735					
150.000			.6754	.5654	.4802	.5326				-.3414	-.3939	-.2344	-.2270	-.1418	
151.000									.5007						
156.000								.7923							
162.000									.5775						
165.000										-.3031	-.4130	-.1683	-.1984	-.1548	
169.000								.9053							
174.000						1.0282									
180.000	1.3678	.8800	.6861	.6020	.5386	.5909		.9107		-.3956	-.4018	-.1600	-.1844	-.1459	
305.000			.6411	.4602	.3929	.3276		-.0056		-.1026					
320.000			.5391	.3754	.3669	.4142		-.2807		-.2598	-.1456	-.0316	-.2137	-.0426	-.0216
340.000			.4886	.3580	.3813	.6259		-.3892		.0300					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.0874	.2247	.3418	.1801	-.2707	-.2808	-.2731		-.2304	-.2244					
40.000	.0175	.1907	.3329	.0955	-.3458	-.2510	-.2649		-.2301	-.2335					
70.000	-.0251	-.0346	.1350	.2243	.0595	-.0930	-.2451								
90.000	-.0216	.0149	.1964	.1999	-.0171	-.0663	-.1508								
105.000			.2139	.0434	-.0864	-.1267	-.1814								
110.000								-.3189							
120.000	-.0617	.0577	.2610	.0195	-.1423	-.2403	-.2676	-.2610							
135.000			.3719	.3692	-.0377	-.0972	-.1383								
150.000	-.0715	-.0212	.3945	.4165	.0887	-.0303	-.1071								
165.000	-.0715		.4059		.3213	.0577	-.2434								
180.000	-.0686	-.0297	.4075	.5586											
320.000	.0705	.1748	.2345	-.1620	-.2983	-.2668	-.3059								

ARC11-019 IA81 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB11)

ALPHA0( 1) = -6.181 BETA0 ( 5) = 4.175

SECTION ( 1) ORBITER FUSELAGE		DEPENDENT VARIABLE CP													
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.3441	.8033	.4011	.3476	.3559	.9632		-.3187		-.3085	-.1680	-.0214	-.0486	-.1017	-.0267
20.000			.3816	.3226	.3254	.5059		-.3168		-.2131					
40.000			.4137	.2987	.2879	.2950		-.3578		-.3838	-.1065	-.1116	-.2556	-.2229	.0023
55.000			.4470	.2898	.2400	.2455		-.0466		-.2249					
70.000			.4752	.2902	.2133	.2407		.0602		-.1292	-.4960	-.3656	-.2273	-.1030	
90.000		.5879	.5167	.3175	.2086	.2381		.1105		-.1251	-.4632	-.4766	-.2073	-.1128	
120.000			.5827	.4273	.3039	.3624		.2974		-.1686	-.3739	-.5796	-.3898	-.1637	
140.000										-.3334					
150.000			.6300	.5343	.4446	.4963				-.3656	-.4195	-.2108	-.2467	-.2077	
151.000									.4385						
156.000								.7475							
162.000									.5297						
165.000										-.3044	-.4313	-.1764	-.2101	-.1854	
169.000								.8749							
174.000						1.0002									
180.000	1.3441	.8577	.6747	.5877	.5265	.5776		.8911		-.4122	-.3647	-.1949	-.1822	-.1543	
305.000			.7145	.5111	.4301	.3556		.0520		-.0500					
320.000			.5753	.3832	.3650	.4224		-.2360		-.2426	-.1189	-.1841	-.2330	-.0620	-.1991
340.000			.4918	.3473	.3653	.6450		-.4376		-.1425					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.0710	.2291	.3845	.2220	-.2573	-.2825	-.2682		-.2295	-.2226					
40.000	.0134	.2193	.4143	.2140	-.3985	-.2328	-.2599		-.2363	-.2285					
70.000	-.0149	-.0315	.1202	.2509	.0518	-.0767	-.2226								
90.000	-.0315	.0185	.1917	.2061	-.0334	-.0837	-.1478								
105.000			.2105	.0591	-.1005	-.1209	-.1599								
110.000								-.3249							
120.000	-.0738	.0709	.2280	-.0424	-.2023	-.2962	-.2924	-.2618							
135.000			.3285	.3310	-.0716	-.1462	-.1618								
150.000	-.1030	-.0334	.3574	.3663	.0461	-.0860	-.1612								
165.000	-.0992		.3628		.2814	.0140	-.2589								
180.000	-.0916	-.0455	.3708	.4884											
320.000	.0529	.1797	.2264	-.2284	-.2990	-.2784	-.3478								

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ARC11-019 IAB1 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB11)

ALPHA0( 2) = -4.161 BETA0 ( 1) = -6.152

SECTION ( 1)ORBITER FUSELAGE				DEPENDENT VARIABLE CP											
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.3248	.8399	.3991	.3228	.3447	.9783		-.2507		-.3327	.0224	-.1805	-.2402	-.2688	.0303
20.000			.4792	.3517	.3269	.6610		-.3642		-.1065					
40.000			.6912	.4211	.3310	.4138		-.1560		-.1862	-.2545	.0511	-.1237	-.2214	-.1553
55.000			.8159	.5575	.4207	.3653		.1509		.0076					
70.000			.8448	.5935	.4344	.3756		.2383		.0924	-.2919	-.1384	-.0820	-.0617	
90.000		1.0344	.8464	.6126	.4497	.4080		.3044		.1299	-.2510	-.1689	-.1218	-.0617	
120.000			.8017	.6164	.4831	.5210		.5398		.1308	-.1623	-.4095	-.1622	-.1002	
140.000										.0996					
150.000			.6954	.5397	.4777	.5442				-.1209	-.4517	-.3178	-.1800	-.1435	
151.000									.6574						
156.000								.9151							
162.000									.6889						
165.000										-.3190	-.4073	-.2841	-.1909	-.1757	
169.000								.9332							
174.000						1.0416									
180.000	1.3248	.8240	.5687	.4949	.4504	.5172		.8042		-.4290	-.3595	-.2752	-.2179	-.2126	
305.000			.3288	.2455	.2429	.1951		-.1856		-.3043					
320.000			.3616	.2693	.3023	.2365		-.5113		-.1716	-.2041	-.0833	-.2084	-.0869	.0160
340.000			.4137	.2929	.3518	.5024		-.3302		-.2281					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1386	.3376	.5990	.2928	-.2868	-.2842	-.2845		-.2315	-.2331					
40.000	-.0063	.1341	.2762	-.1962	-.4230	-.3033	-.3882		-.2234	-.2159					
70.000	-.0225	-.1394	-.1975	.1540	.0846	-.0405	-.2013								
90.000	-.0152	-.0789	-.0667	.1323	.0662	-.0229	-.1140								
105.000			.1450	.1610	-.0007	-.0790	-.1137								
110.000								-.2817							
120.000	-.0738	-.0861	.3030	.1941	-.0115	-.0662	-.0620	-.2007							
135.000			.3396	.3236	.0133	.0601	.0253								
150.000	-.1381	-.0781	.3383	.3456	.1330	.1717	.0515								
165.000	-.1423		.3300		.4767	.2839	-.2195								
180.000	-.1474	-.0342	.3131	.3803											
320.000	.0491	.3886	.5768	.3749	-.2451	-.2788	-.2574								

ARC11-019 1A81 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB11)

ALPHA0( 2) = -4.149 BETA0( 2) = -4.101

SECTION ( 1) ORBITER FUSELAGE				DEPENDENT VARIABLE CP											
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.3430	.8483	.4126	.3385	.3648	.9739		-.2502		-.3023	-.0425	-.1192	-.2515	-.2888	-.0340
20.000			.4730	.3569	.3427	.6350		-.3321		-.2096					
40.000			.6419	.4035	.3265	.3980		-.1989		-.2665	-.2622	-.0114	-.1203	-.1200	-.1712
55.000			.7375	.5038	.3823	.3233		.1042		-.0521					
70.000			.7643	.5282	.3855	.3291		.1948		.0377	-.3391	-.1787	-.1245	-.0679	
90.000		.9502	.7779	.5526	.3969	.3624		.2558		.0714	-.2961	-.2788	-.1499	-.0752	
120.000			.7617	.5844	.4544	.4916		.4954		.0686	-.2013	-.4493	-.1850	-.0968	
140.000										.0332					
150.000			.6933	.5476	.4775	.5399				-.2259	-.4495	-.2946	-.1879	-.1414	
151.000									.6208						
156.000								.8834							
162.000									.6614						
165.000										-.3183	-.3757	-.2838	-.1986	-.1592	
169.000								.9237							
174.000						1.0446									
180.000	1.3430	.8354	.5996	.5218	.4663	.5338		.8398		-.4211	-.3992	-.2330	-.2183	-.1849	
305.000			.4058	.2954	.2781	.2240		-.1525		-.2629					
320.000			.4086	.3030	.3291	.2964		-.4703		-.2396	-.1810	-.1286	-.1590	-.1013	.0038
340.000			.4346	.3192	.3637	.5409		-.3528		-.1938					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1134	.3184	.5659	.2635	-.2258	-.2850	-.2499		-.1963	-.1926					
40.000	-.0127	.1301	.2485	-.1601	-.3532	-.3177	-.3409		-.2048	-.2082					
70.000	-.0448	-.1330	-.1634	.1609	.0614	-.0606	-.2137								
90.000	-.0283	-.0734	.0139	.1324	.0360	-.0428	-.1278								
105.000			.1674	.1495	-.0447	-.1015	-.1348								
110.000								-.3010							
120.000	-.0530	-.0436	.3073	.1818	-.0349	-.1087	-.1125	-.2177							
135.000			.3569	.3419	.0051	.0103	-.0130								
150.000	-.0949	-.0448	.3537	.3609	.1118	.1127	.0191								
165.000	-.1010		.3410		.4095	.2138	-.2291								
180.000	-.1076	-.0398	.3308	.4041											
320.000	.0574	.3521	.5077	.3180	-.2990	-.2223	-.2428								

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ARC11-019 [A81 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB11)

ALPHA0( 2) = -4.119 BETA0( 3) = .013

SECTION ( 1) ORBITER FUSELAGE

DEPENDENT VARIABLE CP

X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.3764	.8569	.4008	.3256	.3478	.8533		-.2733		-.1686	-.0263	-.0311	-.0723	-.1263	-.0081
20.000			.4224	.3243	.3326	.5835		-.3042		-.1721					
40.000			.5269	.3370	.2920	.3558		-.2911		-.2997	-.1108	-.0588	-.1692	-.2858	-.0517
55.000			.5861	.3808	.2888	.2592		.0104		-.1337					
70.000			.6140	.3938	.2751	.2595		.1069		-.0439	-.4185	-.2745	-.1892	-.0977	
90.000		.7735	.6431	.4246	.2875	.2810		.1742		-.0248	-.3825	-.3983	-.1854	-.1120	
120.000			.6680	.4995	.3670	.4203		.4056		-.0601	-.3022	-.5277	-.2741	-.1276	
140.000										-.1863					
150.000			.6580	.5322	.4462	.5098				-.3277	-.4449	-.3030	-.2197	-.1379	
151.000									.5354						
156.000								.8217							
162.000									.5979						
165.000										-.3216	-.3971	-.2210	-.2210	-.1440	
169.000								.9071							
174.000						1.0198									
180.000	1.3764	.8407	.6292	.5440	.4796	.5515		.8934		-.4331	-.4341	-.1924	-.2169	-.1494	
305.000			.5606	.3881	.3298	.2676		-.0680		-.1496					
320.000			.4948	.3288	.3311	.3712		-.3467		-.1748	-.1445	-.0529	-.1883	-.0886	-.0030
340.000			.4608	.3158	.3516	.5948		-.3629		-.0203					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1004	.2204	.3264	.1751	-.2916	-.2783	-.2608		-.2239	-.2161					
40.000	.0403	.1853	.2060	-.1078	-.3037	-.2812	-.2777		-.2180	-.2086					
70.000	-.0495	-.0985	.0413	.1719	.0339	-.0974	-.2404								
90.000	-.0332	-.0482	.1411	.1665	-.0322	-.0805	-.1526								
105.000			.2301	.1064	-.0904	-.1330	-.1742								
110.000								-.3184							
120.000	-.0520	.0057	.2673	.0520	-.0958	-.1933	-.2236	-.2490							
135.000			.3592	.3410	-.0239	-.0724	-.1071								
150.000	-.0711	-.0233	.3783	.3865	.0896	.0044	-.0765								
165.000	-.0711		.3808		.3318	.0862	-.2481								
180.000	-.0721	-.0312	.3814	.5095											
320.000	.0934	.2066	.3179	.0253	-.2789	-.2503	-.2681								



ARC11-019 1A81 LVAP(ELHL SEALED) ORB. FUSELAGE

(RET/11)

ALPHA0( 2) = -4.090 BETA0( 4) = 4.141

SECTION ( 1) ORBITER FUSELAGE		DEPENDENT VARIABLE CP													
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.3261	.8294	.3927	.3115	.3193	.3464		-.3415		-.3885	-.1613	-.0453	-.0103	-.0973	-.0042
20.000			.3690	.2857	.2908	.4905		-.3545		-.3437					
40.000			.4001	.2692	.2530	.2626		-.3918		-.4086	-.1130	-.1132	-.2627	-.1469	.0127
55.000			.4302	.2587	.2085	.2009		-.0759		-.2336					
70.000			.4558	.2584	.1805	.1984		.0273		-.1360	-.5059	-.3776	-.2548	-.1145	
90.000		.5572	.4927	.2860	.1764	.2096		.0805		-.1309	-.4737	-.4929	-.2351	-.1211	
120.000			.5471	.3871	.2568	.3293		.2795		-.1884	-.4009	-.5969	-.3933	-.1681	
140.000										-.3588					
150.000			.5820	.4762	.3835	.4500				-.4029	-.4555	-.2573	-.2768	-.2026	
151.000									.4188						
156.000								.7237							
162.000									.5063						
165.000										-.3434	-.4679	-.2233	-.2428	-.2086	
169.000								.8454							
174.000						.9752									
180.000	1.3261	.7899	.6154	.5309	.4580	.5261		.8597		-.4466	-.4082	-.2506	-.2139	-.1841	
305.000			.7180	.4962	.3973	.3277		.0142		-.0609					
320.000			.5757	.3600	.3253	.4035		-.2568		-.2648	-.1219	-.1969	-.2352	-.0685	-.1863
340.000			.4866	.3181	.3221	.6372		-.4652		-.2002					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.0881	.2492	.3842	.2338	-.2581	-.2750	-.2652		-.2225	-.2213					
40.000	.0423	.2568	.4418	.2634	-.4129	-.2270	-.2569		-.2291	-.2275					
70.000	-.0179	-.0698	.0487	.2084	.0336	-.0956	-.2371								
90.000	-.0205	-.0109	.1384	.1773	-.0517	-.1017	-.1756								
105.000			.1899	.0769	-.1001	-.1300	-.2011								
110.000								-.3290							
120.000	-.0504	.0557	.2058	-.0597	-.2003	-.2674	-.2923	-.2637							
135.000			.2990	.2912	-.0839	-.1409	-.1710								
150.000	-.1057	.0191	.3247	.3212	.0275	-.1116	-.1697								
165.000	-.1079		.3339		.2575	-.0099	-.2478								
180.000	-.1092	-.0299	.3466	.4183											
320.000	.0797	.1947	.2399	-.2221	-.2827	-.3063	-.3525								

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ARC11-019 IAB1 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB11)

ALPHA( 2) = -4.088 BETA( 5) = 6.203

SECTION ( 1) ORBITER FUSELAGE		DEPENDENT VARIABLE CP													
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.3260	.8205	.3701	.2849	.2813	.9508		-.3327		-.3076	-.2840	-.0330	-.1360	-.1420	-.0534
20.000			.3258	.2452	.2550	.4483		-.3693		-.4930					
40.000			.3290	.2180	.2198	.2172		-.4344		-.4200	-.1221	-.1036	-.2985	-.1794	.0076
55.000			.3520	.1935	.1719	.1797		-.1155		-.2612					
70.000			.3775	.1919	.1405	.1636		-.0088		-.1599	-.5212	-.3984	-.2795	-.1204	
90.000		.4323	.4201	.2173	.1297	.1783		.0538		-.1669	-.4938	-.5143	-.2458	-.1350	
120.000			.4764	.3232	.1983	.3023		.2355		-.2258	-.4251	-.6127	-.4358	-.1893	
140.000										-.3947					
150.000			.5203	.4339	.3371	.4154			.3611	-.4090	-.4763	-.2576	-.2908	-.2719	
151.000															
156.000								.6782							
162.000									.4691						
165.000										-.3448	-.4671	-.2376	-.2432	-.2348	
169.000								.8209							
174.000							.9197								
180.000	1.3260	.7352	.5820	.4981	.4297	.5070		.8339		-.4418	-.3494	-.2801	-.2115	-.2062	
305.000			.7930	.5498	.4406	.3603		.0878		.0262					
320.000			.6090	.3688	.3249	.4176		-.1977		-.1447	-.0925	-.3128	-.2042	-.1017	-.2147
340.000			.4897	.2977	.2973	.6519		-.5101		-.1335					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.0718	.2353	.3746	.2269	-.2656	-.2890	-.2790		-.2268	-.2221					
40.000	.0051	.2829	.4946	.3452	-.4069	-.2411	-.2685		-.2349	-.2321					
70.000	-.0146	.0238	.0931	.2536	.0226	-.1133	-.2672								
90.000	-.0235	.0727	.1686	.2101	.0023	-.1209	-.2151								
105.000			.2178	.1717	-.1212	-.1551	-.2301								
110.000								-.3310							
120.000	-.0508	.1210	.1908	-.0638	-.2056	-.3190	-.3660	-.2599							
135.000			.2624	.2647	-.0828	-.1833	-.2287								
150.000	-.1359	.0797	.2881	.2847	.0168	-.1331	-.1982								
165.000	-.1521		.3018		.2507	-.0178	-.2586								
180.000	-.1544	-.0526	.3081	.3704											
320.000	.0898	.2095	.2501	-.2145	-.3058	-.3187	-.4320								

ORIGINAL PAGE IS  
OF POOR QUALITY

ARC11-019 IA81 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB11)

ALPHA0( 3) = -2.044 BETA0 ( 1) = -6.169

SECTION ( 1) ORBITER FUSELAGE		DEPENDENT VARIABLE CP													
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.3270	.8491	.3693	.2836	.3184	.9795		-.2737		-.3857	.0228	-.1755	-.2102	-.2659	.0913
20.000			.4589	.3182	.2936	.6528		-.4075		-.1482					
40.000			.6846	.4006	.3002	.3873		-.1697		-.2277	-.2526	.0445	-.1199	-.1966	-.1555
55.000			.8072	.5436	.3953	.3193		.1329		-.0098					
70.000			.8325	.5700	.3995	.3223		.2159		.0770	-.3012	-.1506	-.0827	-.0875	
90.000		1.0300	.8290	.5875	.4074	.3579		.2839		.1186	-.2635	-.1676	-.1355	-.0853	
120.000			.7476	.5643	.4181	.4561		.5230		.1149	-.1918	-.4170	-.2118	-.1428	
140.000										.0760					
150.000			.6279	.4731	.4043	.4808				-.1525	-.4842	-.3732	-.2175	-.1733	
151.000									.6348						
156.000								.8936							
162.000									.6631						
165.000										-.3495	-.4418	-.3230	-.2290	-.2041	
169.000								.9082							
174.000						1.0152									
180.000	1.3270	.7583	.5030	.4268	.3809	.4593		.7773		-.4519	-.4096	-.3157	-.2538	-.2350	
305.000			.2993	.2061	.2215	.1542		-.2184		-.3333					
320.000			.3338	.2309	.2872	.2139		-.5342		-.2220	-.2128	-.1005	-.1466	-.0881	.0245
340.000			.3885	.2541	.3321	.4959		-.3498		-.3094					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1759	.3548	.6102	.3050	-.2324	-.2977	-.2645		-.2257	-.1991					
40.000	.0134	.1588	.2981	-.1742	-.3803	-.3371	-.4027		-.2110	-.2119					
70.000	-.0423	-.1819	-.2297	.0686	.0405	-.0692	-.2276								
90.000	-.0283	-.1084	-.1627	.0877	.0221	-.0571	-.1461								
105.000			.0679	.1334	-.0317	-.1220	-.1527								
110.000								-.3022							
120.000	-.1161	-.1331	.2624	.1645	-.0285	-.1113	-.1024	-.2143							
135.000			.3038	.2806	-.0193	.0036	-.0037								
150.000	-.1587	-.0950	.3133	.2997	.0797	.1301	.0228								
165.000	-.1562		.2958		.4427	.2498	-.2289								
180.000	-.1485	-.0010	.2850	.3302											
320.000	.0885	.4196	.6009	.4053	-.3056	-.2362	-.2436								

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ARC11-019 IAB1 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB11)

ALPHA0( 3) = -2.029 BETA0 ( 2) = -2.075

SECTION ( 1) ORBITER FUSELAGE		DEPENDENT VARIABLE CP													
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.3973	.8736	.3720	.2790	.3162	.9485		-.2738		-.2563	-.0270	-.0346	-.1217	-.0567	-.0037
20.000			.4214	.2926	.2988	.6113		-.3613		-.3292					
40.000			.5754	.3338	.2722	.3672		-.2684		-.3292	-.2625	-.0238	-.1344	-.2080	-.1288
55.000			.6574	.4216	.3093	.2588		.0382		-.0897					
70.000			.6761	.4371	.3007	.2529		.1231		-.0014	-.3804	-.2374	-.1652	-.1087	
90.000		.8407	.6858	.4618	.3048	.2842		.1912		.0145	-.3397	-.3611	-.1852	-.1078	
120.000			.6732	.4983	.3602	.4083		.4393		-.0082	-.2644	-.4950	-.2359	-.1335	
140.000										-.0597					
150.000			.6202	.4828	.3995	.4742				-.2921	-.4821	-.3319	-.2331	-.1558	
151.000									.5661						
156.000								.8378							
162.000									.6127						
165.000										-.3424	-.4099	-.3125	-.2407	-.1644	
169.000								.8945							
174.000							1.0198								
180.000	1.3973	.7745	.5557	.4772	.4130	.4896		.8470		-.4552	-.4646	-.2471	-.2537	-.1710	
305.000			.4618	.2969	.2764	.2059		-.1322		-.2451					
320.000			.4279	.2605	.2956	.3185		-.4264		-.3503	-.1473	-.1090	-.1024	-.1056	.0055
340.000			.4191	.2567	.3183	.5615		-.3732		-.2006					
X/LB	.5520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1186	.2871	.4816	.1817	-.2384	-.2885	-.2658		-.2055	-.2042					
40.000	.0341	.1563	.2382	-.1901	-.2854	-.3047	-.3315		-.2111	-.2092					
70.000	-.0751	-.1551	-.1743	.1328	.0214	-.0959	-.2441								
90.000	-.0437	-.0834	.0171	.1001	-.0125	-.0839	-.1631								
105.000			.1519	.1189	-.0842	-.1454	-.1762								
110.000								-.3219							
120.000	-.0538	-.0369	.2620	.1515	-.0744	-.1660	-.1860	-.2409							
135.000			.3104	.3162	-.0138	-.0589	-.0827								
150.000	-.0786	.0212	.3171	.3350	.0817	.0399	-.0567								
165.000	-.0792		.3193		.3253	.1368	-.2384								
180.000	-.0805	.0320	.3206	.4197											
320.000	.0865	.3286	.4770	.2753	-.2923	-.2210	-.2552								

ARC11-019 IAB1 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB11)

ALPHA0( 3) = -2.008 BETA0 ( 3) = 2.060

SECTION ( 1) ORBITER FUSELAGE		DEPENDENT VARIABLE CP													
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.3846	.8642	.3784	.2923	.3115	.9717		-.3203		-.4163	-.1519	-.0865	-.0598	-.1055	.0099
20.000			.3780	.2774	.2874	.5306		-.3471		-.2774					
40.000			.4543	.2723	.2465	.2939		-.3617		-.4029	-.1101	-.0613	-.2081	-.1097	.0531
55.000			.5005	.2945	.2252	.1871		-.0614		-.2151					
70.000			.5238	.3037	.2049	.1902		.0464		-.1100	-.4616	-.3513	-.2395	-.1141	
90.000		.6547	.5503	.3342	.2036	.2107		.1157		-.0925	-.4402	-.4507	-.2341	-.1166	
120.000			.5759	.4068	.2740	.3396		.3401		-.1299	-.3755	-.5755	-.3391	-.1424	
140.000										-.2902					
150.000			.5749	.4551	.3619	.4371				-.3891	-.4664	-.3383	-.2737	-.1551	
151.000									.4646						
156.000								.7559							
162.000									.5354						
165.000										-.3553	-.4797	-.2548	-.2614	-.1684	
169.000								.8614							
174.000						.9816									
180.000	1.3846	.7536	.5700	.4819	.4094	.4846		.8592		-.4738	-.4686	-.2481	-.2487	-.1779	
305.000			.6395	.4305	.3497	.2755		-.0693		-.1034					
320.000			.5386	.3293	.3093	.3890		-.3219		-.3227	-.1308	-.1021	-.2008	-.0114	.0331
340.000			.4678	.2931	.3180	.6221		-.4919		-.2351					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1348	.2586	.3582	.2054	-.2537	-.2660	-.2447		-.2093	-.2058					
40.000	.0744	.2532	.3970	.1936	-.3783	-.2336	-.2482		-.2084	-.2171					
70.000	-.0349	-.1258	-.0334	.1612	-.0024	-.1268	-.2727								
90.000	-.0203	-.0604	.0889	.1403	-.0692	-.1344	-.1951								
105.000			.1985	.1079	-.1373	-.1735	-.2180								
110.000								-.3314							
120.000	-.0318	.0225	.2201	-.0133	-.1484	-.2561	-.2926	-.2624							
135.000			.3045	.2952	-.0657	-.1384	-.1785								
150.000	-.0696	.0352	.3299	.3270	.0370	-.0710	-.1502								
165.000	-.0791		.3343		.2690	.0168	-.2395								
180.000	-.0832	.0374	.3314	.4297											
320.000	.1163	.2125	.2505	-.1331	-.2759	-.2771	-.3130								

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## IAB1A - PRESSURE SOURCE DATA TABULATION

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ARC11-019 IAB1 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB11)

ALPHA0 ( 3 ) = -1.995 BETA0 ( 4 ) = 6.179

SECTION ( 1 ) ORBITER FUSELAGE				DEPENDENT VARIABLE CP											
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.3372	.8221	.3487	.2456	.2363	.9303		-.3718		-.3529	-.3230	-.0889	-.0757	-.1521	-.0290
20.000			.2984	.2043	.2096	.4256		-.4005		-.5388					
40.000			.3001	.1823	.1759	.1839		-.4694		-.4645	-.1378	-.1199	-.3020	-.1282	.0404
55.000			.3244	.1528	.1352	.1289		-.1460		-.3019					
70.000			.3497	.1493	.1060	.1134		-.0354		-.1957	-.5409	-.4254	-.3032	-.1320	
90.000		.3937	.3880	.1795	.0926	.1260		.0380		-.1903	-.5205	-.5333	-.2765	-.1419	
120.000			.4350	.2828	.1553	.2490		.2220		-.2409	-.4598	-.6411	-.4460	-.1842	
140.000										-.4159					
150.000			.4642	.3776	.2733	.3599				-.4459	-.5128	-.3029	-.3299	-.2690	
151.000									.3370						
156.000								.6564							
162.000									.4371						
165.000										-.3881	.5099	-.2797	-.2872	-.2566	
169.000								.7923							
174.000							.9017								
180.000	1.3372	.6673	.5126	.4322	.3613	.4467		.7993		-.4785	-.4005	-.3258	-.2523	-.2315	
305.000			.7832	.5339	.4131	.3252		.0558		.0024					
320.000			.6079	.3409	.2874	.3911		-.2216		-.2090	-.0998	-.2997	-.2122	-.0646	-.2082
340.000			.4781	.2583	.2524	.6359		-.5455		-.1908					
X/LB															
	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.0977	.2482	.3738	.2117	-.2605	-.2869	-.2710			-.2143	-.2115				
40.000	.0716	.3179	.5294	.3921	-.4061	-.2375	-.2631			-.2202	-.2237				
70.000	.0328	-.0599	-.0004	.2267	-.0133	-.1448	-.2953								
90.000	.0340	.0140	.1056	.1904	-.0432	-.1487	-.2388								
105.000			.1937	.1574	-.1309	-.1799	-.2545								
110.000								-.3242							
120.000	-.0102	.1106	.1832	-.0608	-.1967	-.3262	-.3762	-.2694							
135.000			.2318	.2304	-.0999	-.2044	-.2550								
150.000	-.0977	.1272	.2572	.2623	-.0111	-.1639	-.2308								
165.000	-.1410		.2769		.2169	-.0564	-.2636								
180.000	-.1646	.0448	.2916	.3607											
320.000	.1212	.2277	.2525	-.2060	-.2834	-.3132	-.4330								

ARC11-019 IA81 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB11)

ALPHA0 (4) = .066 BETA0 (1) = -6.174

SECTION (1) ORBITER FUSELAGE

DEPENDENT VARIABLE CP

X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.3425	.8569	.3548	.2482	.2996	.9648		-.2897		-.4058	-.0234	-.1452	-.1973	-.2364	.1295
20.000			.4539	.2923	.2723	.6453		-.4271		-.2297					
40.000			.6898	.3905	.2853	.3794		-.1741		-.2622	-.2680	.0101	-.1166	-.1223	-.1466
55.000			.8064	.5370	.3832	.3063		.1195		-.0067					
70.000			.8210	.5554	.3775	.2919		.2002		.0769	-.3203	-.1583	-.0750	-.1070	
90.000	1.0116		.8090	.5621	.3762	.3217		.2726		.1233	-.2744	-.2596	-.1293	-.0981	
120.000			.7232	.5237	.3624	.4041		.5192		.1048	-.2045	-.4353	-.2694	-.1738	
140.000										.0601					
150.000			.5817	.4112	.3310	.4166				-.1621	-.5154	-.4203	-.2704	-.2013	
151.000									.6263						
156.000								.8871							
162.000									.6428						
165.000										-.3841	-.4753	-.3565	-.2697	-.2290	
169.000								.8925							
174.000							1.0046								
180.000	1.3425	.7077	.4428	.3711	.3111	.3996		.7496		-.4762	-.4514	-.3507	-.2901	-.2557	
305.000			.2745	.1474	.2129	.1122		-.2393		-.3589					
320.000			.3136	.1878	.2749	.1924		-.5542		-.2447	-.2533	-.0829	-.0702	-.0808	.0411
340.000			.3692	.2132	.3140	.4817		-.3543		-.3831					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1903	.3914	.6279	.3215	-.2060	-.2842	-.2498		-.1836	-.1861					
40.000	.0487	.2030	.3184	-.1097	-.3509	-.3347	-.3968		-.2020	-.1930					
70.000	-.0585	-.2083	-.2584	.0111	-.0013	-.0827	-.2428								
90.000	-.0454	-.1342	-.2056	.0457	-.0077	-.0805	-.1657								
105.000			.0534	.1026	-.0767	-.1393	-.1775								
110.000								-.3211							
120.000	-.1660	-.1869	.2377	.1388	-.0325	-.1536	-.1228	-.2304							
135.000			.2647	.2516	-.0315	-.0247	-.0289								
150.000	-.1695	-.0791	.2828	.2735	.0419	.1026	-.0012								
155.000	-.1511		.2805		.4216	.2245	-.2326								
180.000	-.1202	.0635	.2628	.3177											
320.000	.2272	.4661	.6282	.4413	-.2959	-.2132	-.2281								

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## IABIA - PRESSURE SOURCE DATA TABULATION

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ARC11-019 IAB1 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB11)

ALPHA0 (4) = .072 BETA0 (2) = -4.124

SECTION (1) ORBITER FUSELAGE		DEPENDENT VARIABLE CP													
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.3738	.8688	.3500	.2274	.2948	.9608		-.2846		-.4678	-.0251	-.0866	-.1832	-.1794	.0889
20.000			.4272	.2675	.2672	.6207		-.4190		-.2867					
40.000			.6272	.3470	.2649	.3564		-.2294		-.3352	-.2910	.0409	-.1157	-.0206	-.1227
55.000			.7242	.4704	.3349	.2543		.0585		-.0690					
70.000			.7375	.4886	.3251	.2462		.1554		.0250	-.3541	-.2253	-.1205	-.1179	
90.000		.9145	.7342	.5004	.3225	.2726		.2293		.0623	-.3139	-.3334	-.1746	-.1078	
120.000			.6736	.4879	.3326	.3769		.4668		.0444	-.2457	-.4737	-.2646	-.1622	
140.000										-.0041					
150.000			.5721	.4205	.3365	.4151				-.2671	-.5144	-.3830	-.2736	-.1933	
151.000									.5806						
156.000								.8471							
162.000									.6125						
165.000										-.3742	-.4593	-.3617	-.2771	-.2067	
169.000								.8774							
174.000						1.0028									
180.000	1.3738	.7167	.4722	.3966	.3294	.4145		.7865		-.4749	-.4771	-.3159	-.2942	-.2264	
305.000			.3581	.1657	.2295	.1460		-.2096		-.3165					
320.000			.3578	.1781	.2738	.2523		-.5124		-.4166	-.1682	-.1160	-.0775	-.0709	.0383
340.000			.3804	.1946	.3031	.5115		-.3820		-.4873					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1986	.3669	.5729	.2910	-.2139	-.2843	-.2529		-.1913	-.1957					
40.000	.0507	.1862	.3168	-.1226	-.3213	-.3254	-.3607		-.1932	-.1938					
70.000	-.0845	-.2051	-.2505	.0378	-.0061	-.1052	-.2561								
90.000	-.0607	-.1313	-.1662	.0616	-.0253	-.1040	-.1786								
105.000			.0673	.1122	-.1008	-.1722	-.2010								
110.000								-.3314							
120.000	-.1183	-.1159	.2566	.1423	-.0762	-.1898	-.1678	-.2434							
135.000			.3034	.2701	-.0654	-.0782	-.0760								
150.000	-.1065	-.0341	.2989	.2845	.0085	.0429	-.0454								
165.000	-.0979		.2913		.3370	.1481	-.2379								
180.000	-.0899	.0540		.3093											
320.000	.1745	.4278	.5716	.3903	-.2961	-.2045	-.2338								

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ARC11-019 IAB1 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB11)

ALPHA0( 4) = .075 BETA0 ( 3) = -.018

SECTION ( 1) ORBITER FUSELAGE		DEPENDENT VARIABLE CP													
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.4030	.8750	.3310	.1963	.2519	.8066		-.3196		-.2716	-.0924	-.0347	-.0378	-.0744	.0446
20.000			.3569	.1960	.2370	.5466		-.3901		-.3774					
40.000			.4902	.2281	.2024	.2990		-.3332		-.4558	-.2191	-.0019	-.1685	-.1272	.0552
55.000			.5572	.3110	.2338	.1661		-.0403		-.1642					
70.000			.5760	.3329	.2195	.1501		.0604		-.0632	-.4356	-.3307	-.2048	-.1227	
90.000		.7352	.5935	.3644	.2182	.1748		.1350		-.0368	-.4043	-.4176	-.2261	-.1195	
120.000			.5925	.4142	.2644	.3151		.3834		-.0854	-.3434	-.5493	-.3244	-.1523	
140.000										-.2053					
150.000			.5511	.4165	.3144	.3909				-.3772	-.5211	-.3798	-.2799	-.1661	
151.000									.5032						
156.000								.7929							
162.000									.5546						
165.000										-.3760	-.4761	-.3158	-.2853	-.1728	
169.000								.8678							
174.000							.9893								
180.000	1.4030	.7278	.5067	.4247	.3424	.4281		.8440		-.5246	-.5038	-.2780	-.2831	-.1791	
305.000			.5274	.3253	.2795	.1921		-.1207		-.1939					
320.000			.4581	.2405	.2583	.3244		-.3825		-.3256	-.1116	-.0435	-.1230	-.0356	.0504
340.000			.4082	.2059	.2644	.5665		-.4835		-.3288					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1516	.2586	.3459	.1855	-.2530	-.2635	-.2537		-.2148	-.2126					
40.000	.0937	.2184	.2549	.0038	-.3046	-.3011	-.2913		-.1995	-.2067					
70.000	-.0671	-.1702	-.1896	.1069	-.0234	-.1277	-.2766								
90.000	-.0394	-.0919	-.0054	.0719	-.0670	-.1293	-.1986								
105.000			.1321	.0875	-.1389	-.1843	-.2148								
110.000								-.3333							
120.000	-.0432	-.0070	.2215	.1436	-.1051	-.2218	-.2556	-.2702							
135.000			.2329	.2911	.0027	-.1167	-.1588								
150.000	-.0620	.0624	.2530	.3058	.0478	-.0406	-.1298								
165.000	-.0645		.2851		.2562	.0342	-.2403								
180.000	-.0648	.0493	.2943	.4161											
320.000	.1529	.2701	.3681	.0952	-.3157	-.2588	-.2677								

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## IA81A - PRESSURE SOURCE DATA TABULATION

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ARC11-019 IA81 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB11)

ALPHA0(4) = .088 BETA0(4) = 4.105

SECTION (1) ORBITER FUSELAGE		DEPENDENT VARIABLE CP													
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.3622	.8608	.3557	.2312	.2435	.9353		-.3617		-.4208	-.2485	-.0671	-.0548	-.0934	.0285
20.000			.3276	.2061	.2156	.4731		-.3832		-.5815					
40.000			.3686	.1966	.1915	.2254		-.4241		-.4496	-.1204	-.0750	-.2093	-.1210	.0587
55.000			.3984	.1969	.1630	.1094		-.1152		-.2610					
70.000			.4207	.1973	.1395	.1061		-.0010		-.1573	-.5011	-.4326	-.2737	-.1112	
90.000		.5162	.4562	.2315	.1319	.1176		.0700		-.1345	-.4726	-.5005	-.2724	-.1115	
120.000			.4866	.3199	.1850	.2419		.2853		-.1828	-.4231	-.6160	-.3982	-.1413	
140.000										-.3519					
150.000			.4879	.3802	.2719	.3457				-.4255	-.4963	-.3333	-.3259	-.1938	
151.000									.3990						
156.000								.7021							
162.000									.4748						
165.000										-.3722	-.5109	-.2921	-.3005	-.2252	
169.000								.8124							
174.000							.9382								
180.000	1.3622	.6723	.5021	.4200	.3350	.4121		.8219		-.4797	-.4586	-.3171	-.2802	-.2217	
305.000			.7099	.4653	.3606	.2650		-.0220		-.0433					
320.000			.5739	.3087	.2664	.3621		-.2667		-.2831	-.1083	-.2835	-.2165	.0406	-.0157
340.000			.4658	.2349	.2456	.6184		-.5219		-.2618					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1420	.2875	.4043	.2534	-.2313	-.2550	-.2450			-.1956	-.1987				
40.000	.1137	.3345	.5189	.3575	-.3841	-.2115	-.2409			-.2047	-.2087				
70.000	-.0373	-.1355	-.1212	.1572	-.0187	-.1264	-.2730								
90.000	-.0094	-.0580	.0363	.1150	-.0663	-.1397	-.2151								
105.000			.1493	.1204	-.1487	-.1661	-.2253								
110.000								-.3282							
120.000	-.0192	.0461	.1855	-.0365	-.1756	-.2612	-.2990	-.2621							
135.000			.2435	.2327	-.0876	-.1645	-.2087								
150.000	-.0643	.0938	.2619	.2695	.0083	-.1321	-.1960								
165.000	-.0837		.2664		.1700	-.0456	-.2487								
180.000	-.0993	.0696	.2769	.3112											
320.000	.1416	.2420	.2683	-.1852	-.2550	-.2918	-.3750								

ARC11-019 IAB1 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB11)

ALPHA0( 4) = .092 BETA0 ( 5) = 6.164

SECTION ( 1) ORBITER FUSELAGE		DEPENDENT VARIABLE CP													
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.3288	.8457	.3409	.1974	.1983	.9151		-.3824		-.3733	-.3457	-.0388	.0350	-.1455	.0251
20.000			.2863	.1593	.1710	.4171		-.4014		-.5553					
40.000			.2666	.1447	.1437	.1691		-.4824		-.4721	-.1484	-.0942	-.1976	-.1181	.0648
55.000			.3089	.1206	.1110	.0931		-.1523		-.3089					
70.000			.3338	.1190	.0841	.0760		-.0348		-.1990	-.5417	-.4656	-.3105	-.1232	
90.000		.3777	.3746	.1561	.0717	.0802		.0389		-.1793	-.5230	-.5393	-.2952	-.1296	
120.000			.4130	.2545	.1206	.1920		.2283		-.2370	-.4666	-.6477	-.4463	-.1559	
140.000										-.4177					
150.000			.4273	.3329	.2242	.3016			.3330	-.4616	-.5293	-.3330	-.3526	-.2648	
151.000															
156.000								.6553							
162.000									.4261						
165.000										-.4119	-.5306	-.3098	-.3148	-.2768	
169.000							.8888	.7866							
174.000															
180.000	1.3288	.6244	.4654	.3810	.2982	.3871		.7824		-.4935	-.4338	-.3565	-.2827	-.2593	
305.000			.7862	.5225	.3956	.3026		.0428		.0032					
320.000			.6157	.3220	.2601	.3830		-.2133		-.2415	-.0939	-.2710	-.1896	-.0058	-.1906
340.000			.4757	.2160	.2091	.6303		-.5598		-.2345					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1269	.2715	.3913	.2061	-.2442	-.2689	-.2580		-.1998	-.2020					
40.000	.1316	.3707	.5681	.4410	-.3958	-.2178	-.2577		-.2161	-.2186					
70.000	-.0023	-.0879	-.0862	.2026	-.0196	-.1466	-.3099								
90.000	.0190	-.0198	.0509	.1782	-.0707	-.1622	-.2472								
105.000			.1557	.1664	-.1356	-.1879	-.2596								
110.000								-.3089							
120.000	-.0061	.0938	.1909	-.0091	-.1724	-.3026	-.3659	-.2710							
135.000			.2051	.2171	-.0876	-.2118	-.2614								
150.000	-.0573	.1322	.2213	.2375	-.0263	-.1758	-.2439								
165.000	-.0974		.2442		.1802	-.0790	-.2633								
180.000	-.1397	.0678	.2693	.3277											
320.000	.1500	.2519	.2680	-.1861	-.2550	-.2981	-.4120								

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## IA81A - PRESSURE SOURCE DATA TABULATION

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ARC11-019 IA81 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB11)

ALPHA0 ( 5 ) = 1.116 BETA0 ( 1 ) = -6.171

SECTION ( 1 ) ORBITER FUSELAGE				DEPENDENT VARIABLE CP											
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.3356	.8567	.3507	.2296	.2919	.9548		-.2957		-.4127	-.1310	-.1584	-.1932	-.2135	.1482
20.000			.4502	.2789	.2677	.6417		-.4306		-.2517					
40.000			.6873	.3840	.2810	.3858		-.1776		-.2733	-.2866	-.0403	-.1190	-.0451	-.1405
55.000			.8015	.5305	.3746	.3093		.1068		-.0119					
70.000			.8138	.5455	.3651	.2956		.1928		.0721	-.3296	-.1750	-.0820	-.1180	
90.000		.9981	.7956	.5483	.3590	.3120		.2637		.1214	-.2830	-.2808	-.1480	-.1075	
120.000			.7022	.5012	.3369	.3801		.5129		.0939	-.2156	-.4532	-.3040	-.1896	
140.000										.0479					
150.000			.5563	.3840	.3028	.3904				-.1715	-.5337	-.4465	-.2982	-.2180	
151.000									.6240						
156.000								.8836							
162.000									.6367						
165.000										-.4070	-.4928	-.3789	-.2925	-.2451	
169.000								.8874							
174.000							.9978								
180.000	1.3356	.6918	.4201	.3453	.2797	.3734		.7410		-.4936	-.4723	-.3716	-.3100	-.2722	
305.000			.2673	.1219	.2045	.0980		-.2527		-.3671					
320.000			.3076	.1636	.2694	.1867		-.5628		-.2466	-.2715	-.0798	-.0683	-.0789	.0506
340.000			.3624	.1910	.3073	.4730		-.3554		-.4262					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.2142	.4029	.6295	.3246	-.2198	-.2853	-.2553			-.1842	-.1896				
40.000	.0745	.2224	.3302	-.0930	-.3482	-.3442	-.3942			-.1949	-.1893				
70.000	-.0760	-.2192	-.2771	-.0249	-.0178	-.1000	-.2563								
90.000	-.0630	-.1475	-.2249	.0333	-.0232	-.0917	-.1806								
105.000			.0480	.0846	-.0939	-.1506	-.2001								
110.000								-.3350							
120.000	-.2004	-.2118	.2216	.1186	-.0385	-.1720	-.1391	-.2405							
135.000			.2603	.2346	-.0423	-.0468	-.0490								
150.000	-.1688	-.0517	.2753	.2553	.0160	.0825	-.0171								
165.000	-.1379		.2661		.4017	.2035	-.2399								
180.000	-.0999	.0964	.2441	.2887											
320.000	.2480	.4783	.6341	.4477	-.2863	-.2151	-.2278								

ORIGINAL PAGE IS  
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ARC11-019 1A81 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB11)

ALPHA0( 5) = 1.120 BETAO ( 2) = -2.081

SECTION ( 1)ORBITER FUSELAGE				DEPENDENT VARIABLE CP											
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.4018	.8902	.3286	.1369	.2448	.9044		-.3022		-.4055	-.0929	.0119	-.0365	-.0359	.0629
20.000			.3865	.1858	.2229	.5965		-.4575		-.3275					
40.000			.5570	.2713	.2191	.3405		-.2681		-.4328	-.3076	-.0180	-.1386	-.0953	-.0235
55.000			.6333	.3834	.2743	.2040		.0129		-.1195					
70.000			.6466	.4021	.2610	.1789		.1097		-.0167	-.3973	-.2896	-.1672	-.1217	
90.000		.8096	.6521	.4199	.2572	.2010		.1797		.0151	-.3581	-.3802	-.2190	-.1182	
120.000			.6194	.4326	.2825	.3218		.4261		-.0186	-.2986	-.5133	-.3178	-.1608	
140.000										-.0824					
150.000			.5450	.3980	.3024	.3769				-.3295	-.5272	-.3897	-.2825	-.1782	
151.000									.5411						
156.000								.8214							
162.000									.5789						
165.000										-.3850	-.4705	-.3690	-.2876	-.1896	
169.000								.8720							
174.000							1.0063								
180.000	1.4018	.7083	.4690	.3909	.3142	.3951		.8182		-.5143	-.5103	-.3032	-.3003	-.1931	
305.000			.4295	.1924	.2450	.1414		-.1691		-.2423					
320.000			.3901	.1187	.2476	.2756		-.4519		-.3761	-.1454	-.0769	-.0689	-.0476	.0514
340.000			.3764	.1197	.2716	.5226		-.4090		-.3910					
X/LB															
	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1642	.3146	.4902	.1744	-.2130	-.2667	-.2495			-.1986	-.1924				
40.000	.0769	.2038	.2753	-.1610	-.2680	-.3547	-.3658			-.1933	-.2011				
70.000	-.0972	-.1918	-.2441	.0472	-.0247	-.1220	-.2792								
90.000	-.0673	-.1146	-.1220	.0590	-.0508	-.1264	-.2046								
105.000			.0860	.1098	-.1319	-.1961	-.2241								
110.000								-.3297							
120.000	-.0740	-.0701	.2412	.1292	-.1096	-.2409	-.2202	-.2587							
135.000			.2914	.2619	-.0778	-.1212	-.1377								
150.000	-.0657	.0520	.2666	.2654	-.0123	-.0145	-.1008								
165.000	-.0603		.2589		.2745	.0775	-.2434								
180.000	-.0543	.0943	.2716	.3182											
320.000	.1797	.3579	.4967	.2946	-.3093	-.2152	-.2438								

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## IA81A - PRESSURE SOURCE DATA TABULATION

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ARC11-019 IA81 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB11)

ALPHA0( 5) = 1.132 BETA0 ( 3) = 2.044

SECTION ( 1) ORBITER FUSELAGE				DEPENDENT VARIABLE CP											
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.3842	.8763	.3401	.2138	.2447	.9307		-.3626		-.4950	-.1706	-.0888	-.0369	-.0905	.0471
20.000			.3379	.1992	.2227	.5035		-.3885		-.4586					
40.000			.4232	.2103	.1883	.2566		-.3936		-.4443	-.1674	-.0434	-.1619	-.1182	.0926
55.000			.4751	.2482	.1928	.1167		-.0908		-.2288					
70.000			.4910	.2599	.1702	.1042		.0159		-.1192	-.4862	-.4064	-.2473	-.1268	
90.000		.6233	.5153	.2924	.1648	.1183		.0918		-.0953	-.4565	-.4780	-.2728	-.1217	
120.000			.5257	.3560	.2135	.2472		.3328		-.1437	-.4041	-.5998	-.3677	-.1405	
140.000										-.3032					
150.000			.5030	.3774	.2742	.3395				-.4265	-.5428	-.4038	-.3203	-.1652	
151.000									.4424						
156.000								.7436							
162.000									.5026						
165.000										-.3990	-.5300	-.3180	-.3161	-.1777	
169.000								.8351							
174.000							.9587								
180.000	1.3842	.6839	.4806	.4012	.3131	.3816		.8252		-.5322	-.5207	-.3062	-.3034	-.1977	
305.000			.6132	.3869	.3112	.2135		-.0873		-.1234					
320.000			.5180	.2641	.2569	.3469		-.3340		-.4025	-.1511	-.0602	-.1367	.0493	.0933
340.000			.4353	.2160	.2501	.5903		-.5526		-.3134					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1666	.2823	.3738	.2121	-.2406	-.2635	-.2445		-.2053	-.2081					
40.000	.1169	.2839	.4213	.2226	-.3702	-.2327	-.2455		-.2031	-.2125					
70.000	-.0572	-.1786	-.1978	.1003	-.0305	-.1515	-.2981								
90.000	-.0231	-.0993	-.0172	.0707	-.0779	-.1508	-.2266								
105.000			.1082	.0984	-.1623	-.2082	-.2487								
110.000								-.2917							
120.000	-.0259	.0111	.2140	.1179	-.1512	-.2659	-.3016	-.2627							
135.000			.2468	.2191	-.0843	-.1676	-.2123								
150.000	-.0502	.0821	.2697	.2570	-.0130	-.1092	-.1902								
165.000	-.0610		.2738		.1959	-.0294	-.2381								
180.000	-.0687	.1031	.2742	.3264											
320.000	.1500	.2503	.2789	-.0818	-.2855	-.2943	-.3288								

ARC11-019 IA81 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB11)

ALPHA0( 5) = 1.141 BETA0 ( 4) = 6.158

SECTION ( 1) ORBITER FUSELAGE				DEPENDENT VARIABLE CP											
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.3182	.8549	.3385	.1718	.1803	.9086		-.3875		-.3876	-.3841	-.0047	-.0217	-.1409	.0055
20.000			.2606	.1381	.1527	.4082		-.4080		-.5691					
40.000			.2764	.1247	.1305	.1582		-.5003		-.4828	-.1652	-.0902	-.1670	-.1400	.0848
55.000			.2955	.1041	.1025	.0737		-.1730		-.3147					
70.000			.3214	.1057	.0768	.0574		-.0379		-.2016	-.5503	-.4824	-.3072	-.1228	
90.000		.3657	.3605	.1432	.0621	.0561		.0293		-.1819	-.5264	-.5507	-.2980	-.1174	
120.000			.3955	.2366	.1046	.1521		.2267		-.2414	-.4798	-.6493	-.4528	-.1438	
140.000										-.4262					
150.000			.4071	.3115	.2012	.2609				-.4763	-.5462	-.3489	-.3641	-.2472	
151.000									.3225						
156.000								.6509							
162.000									.4143						
165.000										-.4326	-.5497	-.3263	-.3307	-.2876	
169.000								.7763							
174.000							.8813								
180.000	1.3182	.6035	.4437	.3567	.2711	.3479		.7703		-.5095	-.4584	-.3746	-.3008	-.2691	
305.000			.7886	.5203	.3877	.3023		.0414		.0008					
320.000			.6165	.3131	.2535	.3780		-.2131		-.2526	-.0982	-.3047	-.1810	.0555	-.1596
340.000			.4733	.1937	.1925	.6197		-.5710		-.2469					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1513	.2862	.4021	.2056	-.2405	-.2637	-.2528		-.1962	-.1962					
40.000	.1548	.3960	.5833	.4542	-.3890	-.2115	-.2436		-.2127	-.2112					
70.000	.0253	-.1180	-.1346	.1604	-.0188	-.1524	-.3127								
90.000	.0488	-.0457	-.0074	.1487	-.0821	-.1689	-.2506								
105.000			.1013	.1671	-.1536	-.1991	-.2614								
110.000								-.2885							
120.000	.0198	.0743	.1830	.0983	-.1692	-.2955	-.3474	-.2713							
135.000			.2027	.2064	-.0703	-.2146	-.2681								
150.000	-.0263	.1341	.1996	.2449	-.0229	-.1802	-.2525								
165.000	-.0575		.2100		.1260	-.0903	-.2624								
180.000	-.1103	.1029	.2447	.2974											
320.000	.1646	.2641	.2762	-.1842	-.2516	-.2885	-.4045								

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ARC11-019 IAB1 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB11)

ALPHA0 ( 6 ) = 3.217 BETA0 ( 1 ) = -8.163

SECTION ( 1 ) ORBITER FUSELAGE		DEPENDENT VARIABLE CP													
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.3289	.8797	.3385	.1801	.2756	.9379		-.2840		-.4075	-.1666	-.1838	-.1462	-.1246	.1734
20.000			.4519	.2549	.2617	.6515		-.4376		-.2640					
40.000			.6904	.3788	.2854	.4084		-.1642		-.2617	-.2780	-.2497	-.0881	.1088	-.1071
55.000			.7990	.5294	.3758	.3313		.1016		-.0187					
70.000			.8041	.5398	.3622	.2992		.1797		.0623	-.3267	-.1918	-.0843	-.1183	
90.000		.9815	.7737	.5351	.3435	.3014		.2553		.1261	-.2787	-.2657	-.1731	-.1180	
120.000			.6703	.4701	.3019	.3231		.5065		.1064	-.2204	-.4508	-.3733	-.2280	
140.000										.0545					
150.000			.5152	.3414	.2582	.3186				-.1348	-.5530	-.4711	-.3244	-.2321	
151.000									.6204						
156.000								.8812							
162.000									.6296						
165.000										-.4275	-.5129	-.4023	-.3127	-.2594	
169.000								.8834							
174.000							.9902								
180.000	1.3289	.6565	.3770	.3035	.2369	.3062		.7319		-.5045	-.5012	-.3925	-.3257	-.2816	
305.000			.2545	.0721	.2008	.0959		-.2785		-.3680					
320.000			.2971	.1076	.2872	.1885		-.5664		-.2369	-.2720	-.0431	-.0983	-.0608	.0842
340.000			.3519	.1311	.2974	.4657		-.3396		-.4151					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.2553	.4278	.6438	.3326	-.2111	-.2781	-.2463		-.1741	-.1869					
40.000	.1134	.2541	.3598	-.0974	-.3444	-.3267	-.3671		-.1791	-.1748					
70.000	-.0700	-.2338	-.2933	-.0866	-.0394	-.1178	-.2683								
90.000	-.0674	-.1706	-.2480	-.0004	-.0572	-.1134	-.1895								
105.000			.0060	.0596	-.1264	-.1610	-.2241								
110.000								-.3217							
120.000	-.2497	-.2632	.1870	.1014	-.0477	-.2003	-.1603	-.2512							
135.000			.2254	.1868	-.0633	-.0926	-.0859								
150.000	-.1582	.0002	.2330	.2058	-.0464	.0587	-.0414								
165.000	-.1116		.2102	.3618	.1905	-.2385									
180.000	-.0684	.1264	.1785	.2261											
320.000	.2830	.5059	.6492	.4663	-.2594	-.2206	-.2194								



ARC11-019 1A81 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB11)

ALPHA0( 6) = 3.218 BETA0( 2) = -4.114

SECTION ( 1 ) ORBITER FUSELAGE		DEPENDENT VARIABLE CP													
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.3669	.8938	.3215	.1409	.2469	.9273		-.2897		-.4319	-.1049	-.0995	-.0331	.0321	.0779
20.000			.4133	.2037	.2269	.6202		-.4525		-.3030					
40.000			.6243	.3170	.2409	.3666		-.2034		-.2973	-.3009	-.0759	-.0721	.0274	-.0789
55.000			.7148	.4540	.3195	.2626		.0571		-.0705					
70.000			.7193	.4657	.3002	.2328		.1399		.0250	-.3594	-.2430	-.1216	-.1311	
90.000		.8854	.7041	.4683	.2891	.2322		.2202		.0780	-.3184	-.3342	-.2084	-.1254	
120.000			.6292	.4346	.2722	.2795		.4724		.0456	-.2621	-.4819	-.3504	-.1963	
140.000										-.0158					
150.000			.5125	.3509	.2594	.3119				-.2805	-.5487	-.4492	-.3146	-.2182	
151.000									.5787						
156.000								.8513							
162.000									.6012						
165.000										-.4129	-.4988	-.3970	-.3092	-.2305	
169.000								.8722							
174.000							.9871								
180.000	1.3669	.6608	.4059	.3309	.2568	.3106		.7732		-.5115	-.5093	-.3478	-.3244	-.2344	
305.000			.3341	.1029	.2187	.1131		-.2351		-.3050					
320.000			.3351	.0788	.2709	.2309		-.5128		-.2646	-.2010	-.0643	-.0528	-.0528	.0754
340.000			.3519	.0953	.2763	.4886		-.3738		-.3244					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.2258	.3870	.6020	.2910	-.2017	-.2750	-.2388		-.1754	-.1860					
40.000	.0833	.2220	.3268	-.1025	-.3098	-.3089	-.3357		-.1735	-.1735					
70.000	-.1017	-.2353	-.2841	-.0502	-.0440	-.1243	-.2753								
90.000	-.0836	-.1626	-.2217	.0199	-.0583	-.1262	-.2010								
105.000			-.0020	.0865	-.1528	-.1811	-.2324								
110.000								-.3344							
120.000	-.1801	-.1478	.2228	.1146	-.0824	-.2324	-.1969	-.2582							
135.000			.2675	.2265	-.0875	-.1273	-.1292								
150.000	-.0941	.0196	.2653	.2367	-.0628	.0023	-.0778								
165.000	-.0719		.2463		.2871	.1150	-.2448								
180.000	-.0522	.1198	.2041	.2687											
320.000	.2366	.4574	.5938	.4067	-.2724	-.1861	-.2185								

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ARC11-019 IAB1 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB11)

ALPHA0( 6) = 3.223 BETA0( 3) = -.012

SECTION ( 1) ORBITER FUSELAGE		DEPENDENT VARIABLE CP													
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.3973	.8725	.2543	.1069	.2150	.7203		-.3159		-.1558	-.1475	.0084	.0102	-.0143	.1049
20.000			.2886	.1092	.1817	.5010		-.5055		-.3048					
40.000			.4547	.1757	.1712	.2460		-.3163		-.4287	-.2745	-.0435	-.0796	-.0095	.1328
55.000			.5377	.2908	.2295	.1221		-.0421		-.1542					
70.000			.5545	.3111	.2080	.0875		.0591		-.0490	-.4297	-.3629	-.1777	-.1272	
90.000		.6999	.5655	.3358	.1959	.1035		.1510		-.0202	-.3985	-.4335	-.2415	-.1263	
120.000			.5467	.3659	.2182	.1973		.3941		-.0737	-.3632	-.5547	-.3544	-.1593	
140.000										-.1835					
150.000			.4918	.3561	.2537	.2687				-.3951	-.5589	-.4205	-.3090	-.1646	
151.000									.5033						
156.000								.7926							
162.000									.5499						
165.000										-.4168	-.5201	-.3637	-.3169	-.1639	
169.000								.8655							
174.000							.9794								
180.000	1.3973	.6614	.4391	.3629	.2777	.2933		.8379		-.5737	-.5407	-.3183	-.3173	-.1633	
305.000			.4999	.2729	.2633	.1457		-.1346		-.1685					
320.000			.4100	.1272	.2281	.2671		-.3662		-.3999	-.1243	-.0098	.0225	.0252	.1151
340.000			.3383	.1040	.2291	.5174		-.5643		-.1504					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.2052	.3165	.4153	.2391	-.2274	-.2502	-.2357			-.1946	-.1834				
40.000	.1354	.2686	.3219	.0221	-.2912	-.2705	-.2576			-.1881	-.1896				
70.000	-.0821	-.2080	-.2571	.0249	-.0571	-.1474	-.3022								
90.000	-.0430	-.1334	-.1278	.0427	-.0923	-.1608	-.2322								
105.000			.0639	.0927	-.1992	-.2277	-.2582								
110.000								-.3208							
120.000	-.0341	-.0330	.2018	.1111	-.1462	-.2831	-.2658	-.2645							
135.000			.2239	.2469	-.1011	-.1672	-.2041								
150.000	-.0338	.1127	.2156	.2777	.0143	-.0705	-.1618								
165.000	-.0344		.2321		.1957	.0004	-.2372								
180.000	-.0351	.1057	.2467	.3709											
320.000	.1994	.3292	.4215	.1387	-.2695	-.2398	-.2365								

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ARC11-019 IAB1 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB11)

ALPHA( 6) = 3.229 BETA( 4) = 4.104

SECTION ( 1) ORBITER FUSELAGE		DEPENDENT VARIABLE CP													
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.3537	.8725	.3137	.1237	.1897	.8800		-.3813		-.4254	-.2800	-.0595	-.0320	-.0635	.0740
20.000			.2801	.1092	.1704	.4361		-.4160		-.5686					
40.000			.3270	.1193	.1542	.1971		-.4529		-.4550	-.1594	-.0458	-.1054	-.1003	.1067
55.000			.3636	.1475	.1523	.0634		-.1574		-.2768					
70.000			.3885	.1586	.1260	.0438		-.0299		-.1565	-.5106	-.4690	-.2518	-.1274	
90.000		.4786	.4179	.1973	.1019	.0435		.0592		-.1266	-.4865	-.5234	-.2861	-.1251	
120.000			.4380	.2762	.1387	.1398		.2854		-.1816	-.4474	-.6313	-.4019	-.1353	
140.000										-.3597					
150.000			.4276	.3184	.2099	.2360				-.4571	-.5528	-.3877	-.3612	-.1524	
151.000									.3813						
156.000								.6961							
162.000									.4510						
165.000										-.4175	-.5557	-.3401	-.3434	-.1912	
169.000								.8029							
174.000							.9079								
180.000	1.3537	.6115	.4286	.3496	.2603	.2806		.8074		-.5282	-.5014	-.3642	-.3231	-.2299	
305.000			.6969	.4393	.3373	.2739		-.0283		-.0750					
320.000			.5678	.2525	.2391	.3580		-.2583		-.3127	-.1144	-.2744	-.1131	.1229	.1188
340.000			.4445	.1434	.1997	.5973		-.5718		-.2918					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1890	.3160	.4313	.2602	-.1979	-.2354	-.2223		-.1767	-.1851					
40.000	.1531	.3707	.5419	.3755	-.3631	-.1798	-.2194		-.1929	-.1967					
70.000	-.0395	-.1804	-.2210	.0612	-.0136	-.1407	-.2983								
90.000	-.0122	-.1057	-.0888	.0602	-.0542	-.1455	-.2280								
105.000			.0475	.1073	-.1527	-.2008	-.2506								
110.000								-.2974							
120.000	-.0090	.0249	.1895	.1717	-.1639	-.2706	-.3025	-.2704							
135.000			.2163	.2143	-.0978	-.1847	-.2344								
150.000	-.0249	.1104	.2182	.2336	-.0151	-.1322	-.2172								
165.000	-.0367		.2087		.1180	-.0769	-.2430								
180.000	-.0573	.1260	.2176	.2746											
320.000	.1777	.2725	.2888	-.1623	-.2275	-.2636	-.3331								

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ARC11-019 IAB1 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB11)

ALPHA0 ( 6 ) = 3.228 BETA0 ( 5 ) = 6.167

SECTION ( 1 ) ORBITER FUSELAGE				DEPENDENT VARIABLE CP											
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.3032	.8726	.3275	.1288	.1651	.8863		-.3682		-.4007	-.4335	.0337	-.0767	-.0901	.0341
20.000			.2659	.0881	.1374	.3928		-.4051		-.5730					
40.000			.2575	.0824	.1212	.1429		-.5125		-.4867	-.1848	-.0781	-.1391	-.1178	.0981
55.000			.2747	.0738	.0967	.0443		-.2060		-.3239					
70.000			.2990	.0817	.0582	.0253		-.0655		-.2025	-.5543	-.5025	-.2931	-.1375	
90.000		.3359	.3385	.1193	.0378	.0237		.0228		-.1722	-.5290	-.5598	-.3074	-.1232	
120.000			.3654	.2071	.0780	.0986		.2292		-.2371	-.4894	-.6600	-.4544	-.1400	
140.000										-.4259					
150.000			.3667	.2679	.1654	.1799				-.4904	-.5715	-.3771	-.3857	-.2014	
151.000									.3152						
156.000								.6466							
162.000									.3993						
165.000										-.4607	-.5731	-.3574	-.3536	-.2804	
169.000							.8667	.7625							
174.000															
180.000	1.3032	.5440	.3907	.3089	.2248	.2313		.7501		-.5348	-.4933	-.4093	-.3300	-.2915	
305.000			.7896	.5158	.3883	.3183		.0240		-.0235					
320.000			.6313	.3070	.2566	.3787		-.2057		-.2748	-.1072	-.3221	-.1661	.1581	-.0781
340.000			.4747	.1626	.1882	.6158		-.5800		-.2719					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1660	.2986	.4200	.2098	-.2336	-.2549	-.2426		-.1816	-.1873					
40.000	.1549	.4117	.5929	.4611	-.3829	-.1966	-.2404		-.2082	-.2123					
70.000	.0169	-.1478	-.1950	.0716	-.0262	-.1676	-.3245								
90.000	.0411	-.0771	-.1055	.0984	-.0896	-.1896	-.2595								
105.000			-.0093	.1910	-.2068	-.2358	-.2796								
110.000								-.2933							
120.000	.0086	.0499	.1257	.2353	-.1985	-.3051	-.3401	-.2805							
135.000			.1875	.2025	-.0660	-.2130	-.2853								
150.000	.0038	.1340	.1827	.2021	-.0030	-.1760	-.2614								
165.000	-.0197		.1764		.0349	-.1206	-.2652								
180.000	-.0580	.1251	.1827	.2263											
320.000	.1794	.2748	.2843	-.1797	-.2450	-.2748	-.3787								

ARC11-019 IA81 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB11)

ALPHA0( 7) = 5.320 BETA0 ( 1) = -4.097

SECTION ( 1) ORBITER FUSELAGE				DEPENDENT VARIABLE CP											
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.3630	.8889	.2646	.0686	.2111	.8796		-.3159		-.4192	-.1532	.0360	-.0179	.0598	.1545
20.000			.3775	.1483	.2031	.6145		-.5193		-.3276					
40.000			.6193	.2897	.2349	.3651		-.1909		-.3222	-.2981	.0348	-.0566	.0433	.1180
55.000			.7153	.4413	.3132	.2689		.0390		-.0834					
70.000			.7114	.4486	.2862	.2304		.1150		.0145	-.3573	-.2412	-.1004	-.1432	
90.000		.8776	.6872	.4464	.2653	.2157		.1973		.0774	-.3185	-.3313	-.1819	-.1511	
120.000			.5966	.3982	.2291	.2311		.4676		.0472	-.2702	-.4934	-.4125	-.2507	
140.000										-.0139					
150.000			.4715	.3059	.2134	.2282				-.2794	-.5745	-.4940	-.3443	-.2364	
151.000									.5776						
156.000								.8484							
162.000									.5979						
165.000										-.4377	-.5274	-.4258	-.3364	-.2371	
169.000								.8666							
174.000						.9847									
180.000	1.3630	.6202	.3603	.2872	.2125	.2221		.7686		-.5338	-.5404	-.3811	-.3481	-.2037	
305.000			.3037	.0804	.2016	.0775		-.2535		-.3016					
320.000			.2840	.0363	.2484	.2012		-.5063		-.1605	-.2145	-.0040	-.0036	-.0198	.0862
340.000			.2958	.0493	.2638	.4442		-.3842		-.2078					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.2177	.3800	.5980	.2928	-.2425	-.2571	-.2344		-.1971	-.1987					
40.000	.0907	.2209	.3226	-.0994	-.3358	-.2806	-.2882		-.1797	-.1737					
70.000	-.0996	-.2631	-.3160	-.1128	-.0764	-.1469	-.2901								
90.000	-.0840	-.1993	-.2617	-.0137	-.1117	-.1555	-.2293								
105.000			-.0445	.0600	-.1876	-.2003	-.2624								
110.000								-.3038							
120.000	-.2129	-.1858	.1819	.0909	-.0990	-.2564	-.2510	-.2637							
135.000			.2070	.1832	-.1066	-.1731	-.1626								
150.000	-.0795	.0305	.2134	.2017	-.0895	-.0255	-.1133								
165.000	-.0583		.1886		.2347	.0995	-.2430								
180.000	-.0379	.1076	.1730	.2699											
320.000	.2196	.4265	.5754	.3680	-.2488	-.2020	-.2220								

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## IAB1A - PRESSURE SOURCE DATA TABULATION

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ARC11-019 IAB1 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB11)

ALPHA0( 7) = 5.323 BETA0( 2) = -2.054

SECTION ( 1) ORBITER FUSELAGE		DEPENDENT VARIABLE CP													
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.3732	.8754	.2132	.0558	.1907	.7928		-.2673		-.1117	-.1400	.0691	.0220	.0379	.1353
20.000			.3078	.0882	.1567	.5522		-.5206		-.3269					
40.000			.5252	.2069	.1974	.2822		-.2398		-.3508	-.3284	-.0141	-.0517	-.0145	.1674
55.000			.6181	.3618	.2660	.1895		-.0058		-.1196					
70.000			.6269	.3758	.2358	.1568		.0801		-.0233	-.3998	-.3035	-.1206	-.1508	
90.000		.7805	.6162	.3847	.2193	.1548		.1704		.0298	-.3666	-.3925	-.2025	-.1527	
120.000			.5543	.3653	.2116	.1834		.4346		-.0106	-.3809	-.5297	-.3804	-.2203	
140.000										-.0842					
150.000			.4552	.3091	.2206	.2151				-.3418	-.5859	-.4646	-.3420	-.1924	
151.000									.5399						
156.000								.8207							
162.000									.5710						
165.000										-.4409	-.5429	-.4306	-.3394	-.1692	
169.000								.8611							
174.000						.9849									
180.000	1.3732	.6120	.3748	.3031	.2302	.2164		.8051		-.5757	-.5630	-.3623	-.3493	-.1438	
305.000			.3813	.1532	.2309	.0926		-.1940		-.2436					
320.000			.3187	.0421	.2158	.2074		-.4243		-.1677	-.2111	.0179	.0303	.0077	.1169
340.000			.2780	.0491	.2315	.4368		-.4720		.0430					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.2220	.3332	.4866	.2821	-.2747	-.2461	-.2298		-.1906	-.1931					
40.000	.1363	.2439	.3126	-.1686	-.2906	-.2652	-.2524		-.1800	-.1794					
70.000	-.1028	-.2466	-.3020	-.0788	-.0793	-.1593	-.3027								
90.000	-.0733	-.1768	-.2258	-.0028	-.1130	-.1705	-.2387								
105.000			.0172	.0696	-.2140	-.2175	-.2705								
110.000								-.3058							
120.000	-.1031	-.1181	.1957	.0821	-.1266	-.2775	-.2594	-.2699							
135.000			.2211	.2118	-.1120	-.1773	-.1925								
150.000	-.0453	.0547	.2071	.2442	-.0764	-.0608	-.1470								
165.000	-.0358		.1916		.1959	.0344	-.2384								
180.000	-.0298	.1010	.2014	.2906											
320.000	.2112	.3755	.4936	.2728	-.2515	-.2027	-.2164								

ARC11-019 IAS1 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB11)

ALPHA0( 7) = 5.325 BETA0 ( 3) = .002

SECTION ( 1) ORBITER FUSELAGE	DEPENDENT VARIABLE CP														
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.3842	.8827	.2341	.0805	.2103	.7052		-.3195		-.0778	-.1729	.0404	.0413	.0321	.1286
20.000			.2743	.0834	.1646	.4720		-.4987		-.2532					
40.000			.4487	.1491	.1579	.2177		-.3134		-.4067	-.1419	-.0476	-.0336	.0143	.1387
55.000			.5306	.2783	.2293	.1227		-.0673		-.1623					
70.000			.5429	.3015	.2004	.0871		.0210		-.0558	-.4328	-.3659	-.1638	-.1581	
90.000		.6781	.5458	.3174	.1798	.0896		.1348		-.0162	-.4023	-.4382	-.2305	-.1479	
120.000			.5128	.3326	.1833	.1525		.3926		-.0677	-.3691	-.5608	-.3371	-.1898	
140.000										-.1665					
150.000			.4451	.3088	.2167	.1970				-.4014	-.5871	-.4510	-.3314	-.1627	
151.000									.4964						
156.000								.7820							
162.000									.5374						
165.000										-.4419	-.5491	-.3912	-.3378	-.1462	
169.000								.8519							
174.000						.9631									
180.000	1.3842	.6066	.3901	.3185	.2372	.2169		.8230		-.5955	-.5644	-.3455	-.3413	-.1392	
305.000			.4947	.2652	.2603	.1627		-.1490		-.1872					
320.000			.4075	.1160	.2225	.2730		-.3463		-.3909	-.1387	.0023	.0477	.0281	.1308
340.000			.3307	.0827	.2212	.5106		-.5856		-.1193					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.2154	.3282	.4323	.2515	-.2252	-.2388	-.2241		-.1831	-.1863					
40.000	.1464	.2744	.3383	.0009	-.2821	-.2464	-.2260		-.1775	-.1784					
70.000	-.0953	-.2384	-.2938	-.0454	-.0958	-.1686	-.3123								
90.000	-.0549	-.1687	-.1906	.0032	-.1302	-.1784	-.2486								
105.000			.0489	.0660	-.2395	-.2375	-.2798								
110.000								-.3230							
120.000	-.0514	-.0791	.2030	.0538	-.1505	-.3037	-.2858	-.2667							
135.000			.2242	.2547	-.1292	-.1974	-.2250								
150.000	-.0263	.0483	.2172	.2931	-.0437	-.1070	-.1846								
165.000	-.0250		.2261		.1796	-.0315	-.2393								
180.000	-.0254	.0673	.2400	.3799											
320.000	.2061	.3272	.4077	.1028	-.2413	-.2279	-.2215								

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## IABIA - PRESSURE SOURCE DATA TABULATION

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ARC11-019 IAB1 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB11)

ALPHA0( 7) = 5.323 BETA0( 4) = 2.067

SECTION ( 1) ORBITER FUSELAGE		DEPENDENT VARIABLE CP													
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.3747	.8979	.2926	.1056	.1880	.7742		-.3908		-.3715	-.1446	.0320	.0191	-.0222	.1020
20.000			.2884	.0983	.1690	.4557		-.4624		-.2580					
40.000			.3922	.1284	.1478	.2270		-.3899		-.4793	-.1389	-.0361	-.0669	.0013	.1376
55.000			.4453	.2093	.1887	.0942		-.1273		-.2275					
70.000			.4608	.2248	.1633	.0573		-.0157		-.1076	-.4699	-.4085	-.1958	-.1478	
90.000		.5727	.4757	.2496	.1402	.0550		.1052		-.0675	-.4460	-.4862	-.2608	-.1463	
120.000			.4647	.2921	.1609	.1275		.3494		-.1195	-.4199	-.5979	-.3287	-.1574	
140.000										-.2700					
150.000			.4242	.2997	.2032	.1933				-.4397	-.5861	-.4512	-.3475	-.1291	
151.000									.4442						
156.000								.7475							
162.000									.4941						
165.000										-.4409	-.5625	-.3665	-.3503	-.1307	
169.000								.8308							
174.000							.9458								
180.000	1.3747	.5882	.3942	.3187	.2340	.2170		.8130		-.5822	-.5546	-.3567	-.3392	-.1524	
305.000			.6040	.3593	.2982	.2177		-.0821		-.1475					
320.000			.5064	.1925	.2247	.3100		-.2958		-.3633	-.1201	-.1256	.0388	.0702	.1436
340.000			.4008	.1043	.1978	.5541		-.5855		-.3162					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.2062	.3181	.4107	.2564	-.1846	-.2097	-.2027			-.1718	-.1734				
40.000	.1363	.3118	.4342	.2243	-.3142	-.1808	-.1989			-.1784	-.1855				
70.000	-.0780	-.2318	-.2808	-.0224	-.0817	-.1773	-.3232								
90.000	-.0398	-.1558	-.1824	.0198	-.1252	-.1909	-.2542								
105.000			-.0008	.0811	-.2580	-.2570	-.2870								
110.000								-.2997							
120.000	-.0214	-.0421	.1453	.1118	-.1960	-.3169	-.3210	-.2541							
135.000			.2313	.2630	-.1176	-.2046	-.2495								
150.000	-.0134	.0592	.2548	.2868	-.0191	-.1407	-.2202								
165.000	-.0179		.2481		.1439	-.0714	-.2406								
180.000	-.0306	.0884		.3078											
320.000	.1958	.2973	.3275	-.0623	-.2484	-.2453	-.2577								



ARC11-019 IA81 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB11)

ALPHA( 7) = 5.325 BETA( 5) = 4.125

SECTION ( 1) ORBITER FUSELAGE		DEPENDENT VARIABLE CP													
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.3392	.8757	.2862	.0654	.1666	.8176		-.3735		-.4239	-.2267	-.0536	-.0175	-.0712	.0819
20.000			.2448	.0638	.1497	.4032		-.4358		-.4532					
40.000			.2956	.0800	.1405	.1739		-.4619		-.4405	-.1499	-.0367	-.1211	-.0404	.1121
55.000			.3379	.1197	.1497	.0457		-.1914		-.2758					
70.000			.3615	.1325	.1186	.0244		-.0686		-.1534	-.5125	-.4148	-.2295	-.1439	
90.000		.4372	.3910	.1671	.0862	.0237		.0558		-.1191	-.4890	-.5349	-.2835	-.1420	
120.000			.4052	.2361	.1085	.0965		.2871		-.1837	-.4686	-.6420	-.3121	-.1515	
140.000										-.3635					
150.000			.3848	.2723	.1743	.1692			.3818	-.4760	-.5855	-.4246	-.3756	-.1328	
151.000															
156.000								.6855							
162.000									.4463						
165.000										-.4556	-.5813	-.3719	-.3629	-.1529	
169.000								.7962							
174.000							.8688								
180.000	1.3392	.5514	.3819	.3059	.2179	.1936		.7981		-.5624	-.5339	-.3967	-.3471	-.2009	
305.000			.6923	.4313	.3397	.2826		-.0559		-.1024					
320.000			.5583	.2326	.2442	.3511		-.2393		-.3361	-.1211	-.1720	.0021	.1442	.1865
340.000			.4201	.0897	.1855	.5808		-.5863		-.3195					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1894	.3128	.4255	.2617	-.1859	-.2133	-.2181		-.1769	-.1822					
40.000	.1481	.3585	.5276	.3535	-.3520	-.1667	-.2165		-.1916	-.2004					
70.000	-.0651	-.2157	-.2698	.0142	-.0493	-.1667	-.3244								
90.000	-.0253	-.1432	-.1737	.0396	-.0807	-.1724	-.2509								
105.000			-.0382	.0955	-.2265	-.2346	-.2783								
110.000								-.3295							
120.000	.0017	-.0141	.1240	.1874	-.1759	-.3076	-.3050	-.2663							
135.000			.2296	.2681	-.0924	-.2140	-.2685								
150.000	-.0021	.0769	.2261	.1935	-.0473	-.1532	-.2364								
165.000	-.0222		.1985		.0999	-.0934	-.2561								
180.000	-.0336	.1046	.1899	.2615											
320.000	.1876	.2693	.2900	-.1706	-.2117	-.2541	-.2949								

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## IABIA - PRESSURE SOURCE DATA TABULATION

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ARC11-019 IAB1 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB12) ( 02 OCT 74 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 976.0000 IN. XT  
 LREF = 1297.0000 INCHES YMRP = .0000 IN. YT  
 BREF = 1297.0000 INCHES ZMRP = 400.0000 IN. ZT  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

MACH = 1.400 RN/FT = 2.250  
 ELV-18 = 8.000 ELV-08 = .000  
 RUDDER = .000 SPDBRK = .000

ALPHA0 ( 1 ) = -6.305 BETA0 ( 1 ) = -4.079

## SECTION ( 1 ) ORBITER FUSELAGE

## DEPENDENT VARIABLE CP

X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.4230	.9490	.4494	.2807	.4163	1.0533		-.1176		-.2958	-.0004	.0043	-.1046	-.2425	-.1541
20.000			.5220	.3321	.3903	.7539		-.2750		-.1704					
40.000			.7074	.4229	.3693	.5243		-.0819		-.2921	-.0769	-.0648	.0063	-.1663	-.0864
55.000			.8179	.5669	.4529	.4086		.1880		.0305					
70.000			.8214	.5855	.4514	.4023		.2758		.1236	-.2312	-.0775	-.0387	-.0027	
90.000		1.0008	.8381	.6217	.4687	.4295		.3400		.1609	-.1830	-.2100	-.0730	-.0052	
120.000			.8280	.6555	.5218	.5590		.5885		.1797	-.0903	-.3274	-.1167	-.0117	
140.000										.1517					
150.000			.7665	.6199	.5390	.6082				-.0747	-.3012	-.1685	-.1012	-.0529	
151.000									.7286						
156.000								.9833							
162.000									.7744						
165.000										-.1590	-.2393	-.1576	-.1022	-.0768	
169.000								1.0275							
174.000							1.1278								
180.000	1.4230	.9079	.6724	.5886	.5274	.6047		.9475		-.2589	-.2791	-.1260	-.1111	-.1004	
305.000			.4555	.2497	.3713	.3144		-.0284		-.1307					
320.000			.4597	.2395	.4377	.4032		-.3142		-.2946	-.0754	-.0545	-.1090	-.0091	.0275
340.000			.4826	.2574	.4664	.6516		-.2049		-.3979					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	-.0516	.2824	.5654	.2904	-.2646	-.2882	-.2684			-.2221	-.2258				
40.000	-.0206	.0902	.2321	-.1545	-.3682	-.2931	-.4050			-.2194	-.2224				
70.000	.0142	-.0597	-.0980	.1255	.0932	.0033	-.1268								
90.000	.0337	-.0172	.0012	.1385	.0678	.0132	-.0536								
105.000			.1311	.1844	-.0367	-.0498	-.0778								
110.000										-.2032					
120.000	-.0091	-.0013	.2938	.2262	.0420	-.0930	-.0698			-.1625					
135.000			.3416	.3502	.0789	.0551	.0346								
150.000	-.0550	-.0131	.3338	.3598	.1632	.1873	.0939								
165.000	-.0650		.3137		.4832	.3062	-.2054								
180.000	-.0687	-.0391	.2920	.3942											
320.000	-.0212	.2805	.4420	.3214	-.2305	-.2429	-.2467								

ORIGINAL PAGE IS  
OF POOR QUALITY

ARC11-019 IAB1 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB12)

ALPHA0( 1) = -5.288 BETA0( 2) = -2.026

SECTION ( 1) ORBITER FUSELAGE	DEPENDENT VARIABLE CP														
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.4260	.9856	.4431	.2245	.3735	1.0045		-.1358		-.3573	-.0035	.0790	-.0655	-.1977	-.1848
20.000			.4931	.2717	.3652	.7309		-.2756		-.1833					
40.000			.6484	.3516	.3575	.5002		-.1103		-.3177	-.0791	.0650	.0065	-.1624	-.0747
55.000			.7326	.4815	.3917	.3810		.1650		.0016					
70.000			.7474	.5126	.3914	.3655		.2471		.0957	-.2601	-.1646	-.0621	-.0172	
90.000		.9227	.7638	.5503	.4056	.3907		.3108		.1236	-.2179	-.2475	-.1081	-.0184	
120.000			.7770	.6098	.4784	.5264		.5502		.1263	-.1327	-.3618	-.1841	-.0308	
140.000										.0786					
150.000			.7465	.6101	.5254	.5983				-.1194	-.3010	-.1708	-.1081	-.0604	
151.000									.6908						
156.000								.9527							
162.000									.7432						
165.000										-.1594	-.2461	-.1510	-.1093	-.0793	
169.000								1.0159							
174.000						1.1264									
180.000	1.4260	.9133	.6861	.5994	.5351	.6139		.9747		-.2586	-.2898	-.0908	-.1096	-.1019	
305.000			.5459	.3072	.3713	.3340		.0114		-.0869					
320.000			.5117	.2116	.3965	.4442		-.2619		-.2598	-.0528	-.0454	-.0932	-.0017	-.0159
340.000			.4969	.2011	.4594	.6734		-.2248		-.2533					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.0293	.2362	.4855	.2153	-.2569	-.2856	-.2526			-.2055	-.2052				
40.000	.0023	.1051	.2748	-.1505	-.3078	-.3066	-.3596			-.2137	-.2118				
70.000	-.0048	-.0684	-.0471	.1498	.0694	-.0164	-.1421								
90.000	.0151	-.0353	.0981	.1328	.0360	-.0062	-.0651								
105.000			.2121	.1529	-.0541	-.0646	-.0898								
110.000									-.2157						
120.000	-.0118	.0058	.2779	.1536	.0191	-.1180	-.1312		-.1823						
135.000			.3407	.3549	.0685	.0287	-.0034								
150.000	-.0288	.0052	.3413	.3891	.1676	.1345	.0572								
165.000	-.0288		.3348		.4426	.2320	-.2197								
180.000	-.0288	-.0174	.3314	.4916											
320.000	-.0112	.2566	.4281	.2472	-.2390	-.2068	-.2485								

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## IABIA - PRESSURE SOURCE DATA TABULATION

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ARC11-019 IAB1 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB12)

ALPHA0( 1) = -6.273 BETA0 ( 3) = .028

SECTION ( 1) ORBITER FUSELAGE

DEPENDENT VARIABLE CP

X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.4158	.9914	.4483	.2135	.3449	.9596		-.1595		-.3572	.0244	.0737	-.0349	-.0788	-.0536
20.000			.4750	.2406	.3384	.6876		-.2422		-.2498					
40.000			.5939	.2980	.3320	.4612		-.1522		-.3037	-.0836	.0213	-.0334	-.2138	-.1045
55.000			.6555	.4020	.3313	.3423		.1254		-.0319					
70.000			.6687	.4338	.3258	.3245		.2105		.0559	-.2961	-.2498	-.1013	-.0408	
90.000		.8344	.6977	.4785	.3400	.3420		.2683		.0769	-.2591	-.2855	-.1344	-.0420	
120.000			.7291	.5594	.4222	.4805		.5002		.0619	-.1828	-.3989	-.2113	-.0550	
140.000										-.0597					
150.000			.7209	.5952	.4992	.5747				-.1757	-.3016	-.1804	-.1288	-.0875	
151.000									.6440						
156.000								.9167							
162.000									.7089						
165.000										-.1689	-.2778	-.1230	-.1165	-.1073	
169.000								1.0036							
174.000						1.1015									
180.000	1.4158	.9080	.6955	.6060	.5326	.6140		.9928		-.2843	-.2976	-.0847	-.1094	-.1110	
305.000			.6238	.3838	.3885	.3495		.0506		-.0538					
320.000			.5557	.2480	.3682	.4714		-.2119		-.2585	-.0256	-.0921	-.0680	-.0199	-.0582
340.000			.5168	.2057	.3960	.6957		-.3006		-.2070					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.0262	.2001	.3636	.2672	-.2520	-.2770	-.2591			-.2172	-.2126				
40.000	-.0060	.1331	.2292	-.1249	-.2819	-.3029	-.3253			-.2187	-.2266				
70.000	-.0146	-.0919	-.0053	.1504	.0597	-.0388	-.1684								
90.000	-.0001	-.0613	.1229	.1399	.0007	-.0237	-.0786								
105.000			.1940	.0682	-.0756	-.0901	-.1105								
110.000															
120.000	-.0199	-.0112	.2558	.0903	-.0268	-.1616	-.2343			-.2321					
135.000			.3321	.3426	.0452	-.0078	-.0492			-.2129					
150.000	-.0279	-.0053	.3411	.3834	.1523	.0783	.0034								
165.000	-.0282		.3370		.4031	.1687	-.2244								
180.000	-.0287	-.0093	.3417	.5153											
320.000	-.0155	.1995	.3633	.0439	-.2881	-.2343	-.2817								

ARC11-019 IA81 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETR12)

ALPHA0 (1) = -6.241 BETA0 (4) = 2.117

## SECTION (1) ORBITER FUSELAGE

## DEPENDENT VARIABLE CP

X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.3925	.9744	.4473	.2265	.3568	.9885		-.1726		-.2950	-.0382	.0720	.0382	-.0125	-.0157
20.000			.4495	.2265	.3315	.6498		-.1932		-.3636					
40.000			.5317	.2568	.3201	.4245		-.1978		-.2371	-.0302	-.0101	-.0736	-.2174	-.1784
55.000			.5855	.3300	.2957	.3201		.0830		-.0682					
70.000			.5934	.3609	.2728	.2976		.1740		.0199	-.3210	-.2962	-.1374	-.0501	
90.000		.7380	.6315	.4079	.2827	.3073		.2389		.0354	-.2879	-.3146	-.1587	-.0538	
120.000			.6753	.5055	.3722	.4385		.4533		.0116	-.2194	-.4193	-.2393	-.0829	
140.000										-.1311					
150.000			.6904	.5729	.4737	.5503				-.2051	-.2814	-.1760	-.1474	-.1363	
151.000									.5930						
156.000								.8739							
162.000									.6725						
165.000										-.1698	-.2993	-.1010	-.1202	-.1233	
169.000								.9850							
174.000						1.0891									
180.000	1.3925	.8897	.6948	.6074	.5295	.6042		.9899		-.2770	-.2882	-.0936	-.1106	-.1011	
305.000			.7030	.4687	.4273	.3880		.0778		-.0144					
320.000			.5985	.3124	.3743	.5098		-.1598		-.2968	.0277	-.1890	-.0847	-.0599	-.1465
340.000			.5308	.2441	.3740	.7332		-.3581		-.1754					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.0397	.1980	.3494	.2291	-.2515	-.2725	-.2586		-.2182	-.2164					
40.000	-.0677	.1748	.3463	.0807	-.3268	-.2469	-.2660		-.2207	-.2240					
70.000	-.0315	-.0993	.0161	.1638	.0524	-.0511	-.1824								
90.000	-.0192	-.0628	.1240	.1447	-.0124	-.0363	-.0994								
105.000			.1691	.0290	-.0927	-.1058	-.1316								
110.000								-.2468							
120.000	-.0430	-.0297	.2319	.0320	-.0712	-.2016	-.3048	-.2310							
135.000			.3057	.3128	.0233	-.0501	-.0945								
150.000	-.0473	-.0278	.3206	.3572	.1327	.0251	-.0465								
165.000	-.0411		.3252		.3680	.1205	-.2310								
180.000	-.0368	-.0247	.3329	.4882											
320.000	.0062	.1855	.2757	-.1002	-.3046	-.2480	-.3326								

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## IABIA - PRESSURE SOURCE DATA TABULATION

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ARC11-019 IAB1 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB12)

ALPHA( 1) = -6.229 BETA( 5) = 4.174

SECTION ( 1) ORBITER FUSELAGE		DEPENDENT VARIABLE CP													
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.4122	.9190	.4459	.3006	.3718	1.0252		-.1934		-.2628	-.1308	.0710	.0142	-.0198	-.1135
20.000			.4210	.2703	.3462	.6060		-.2105		-.3953					
40.000			.4579	.2561	.3200	.3827		-.2434		-.2672	-.0369	-.0192	-.1223	-.2774	-.2252
55.000			.5007	.2728	.2842	.3078		.0429		-.1069					
70.000			.5221	.2965	.2509	.2747		.1444		-.0212	-.3509	-.3431	-.1650	-.0692	
90.000		.6216	.5583	.3419	.2367	.2710		.2044		-.0159	-.3267	-.3456	-.1752	-.0788	
120.000			.6147	.4530	.3165	.3920		.3991		-.0406	-.2569	-.4451	-.2789	-.1261	
140.000										-.1925					
150.000			.6516	.5484	.4450	.5162				-.2278	-.3093	-.1464	-.1650	-.1661	
151.000									.5350						
156.000								.8320							
162.000									.6272						
165.000										-.1770	-.3161	-.1044	-.1366	-.1271	
169.000								.9537							
174.000						1.0601									
180.000	1.4122	.8642	.6890	.5993	.5243	.5916		.9698		-.2755	-.2765	-.1362	-.1177	-.1030	
305.000			.7870	.5579	.4740	.4148		.1104		.0149					
320.000			.6462	.3851	.3792	.5165		-.1288		-.2498	.0413	-.2060	-.1115	-.0860	-.1457
340.000			.5542	.3141	.3777	.7467		-.3637		-.1556					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.0640	.1794	.3750	.2319	-.2435	-.2791	-.2676		-.2251	-.2247					
40.000	-.1259	.1534	.3643	.1904	-.3548	-.2764	-.2605		-.2302	-.2287					
70.000	-.0347	-.1108	.0030	.1799	.0451	-.0609	-.1902								
90.000	-.0350	-.0742	.1082	.1490	-.0347	-.0733	-.1263								
105.000			.1549	.0194	-.1054	-.1264	-.1514								
110.000								-.2590							
120.000	-.0681	-.0489	.1904	-.0331	-.1233	-.2540	-.3563	-.2540							
135.000			.2619	.2716	-.0093	-.0978	-.1462								
150.000	-.0777	-.0604	.2779	.3062	.0806	-.0303	-.1003								
165.000	-.0718		.2832		.3185	.0707	-.2506								
180.000	-.0674	-.0430	.2983	.4050											
320.000	-.0040	.1725	.2532	-.1685	-.3019	-.2751	-.3876								

ARC11-019 IAB1 LVAP(ELHL SEALED) L11. FUSELAGE

(RETB12)

ALPHA( 2) = -4.192 BETA( 1) = -6.158

SECTION ( 1) ORBITER FUSELAGE		DEPENDENT VARIABLE CP													
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.3408	.9523	.4438	.2532	.3539	1.0331		-.1432		-.2660	-.0516	-.0371	-.1086	-.1986	-.1227
20.000			.5434	.3237	.3246	.7478		-.3339		-.1568					
40.000			.7694	.4477	.3388	.4862		-.0686		-.2291	-.0808	-.1442	.0043	-.1677	-.0409
55.000			.8866	.6168	.4720	.3910		.1957		.0526					
70.000			.9093	.6523	.4865	.3837		.2769		.1431	-.2132	-.0486	-.0273	-.0171	
90.000		1.0522	.8769	.6545	.4844	.4043		.3480		.1978	-.1629	-.1939	-.0653	-.0230	
120.000			.8217	.6378	.4871	.4983		.5977		.2105	-.0815	-.3117	-.1126	-.0384	
140.000										.1798					
150.000			.7120	.5491	.4656	.5217				-.0457	-.3365	-.2508	-.1513	-.0855	
151.000									.7338						
156.000								.9765							
162.000									.7667						
165.000										-.1967	-.2973	-.2013	-.1457	-.1146	
169.000								.9969							
174.000							1.0848								
180.000	1.3408	.8385	.5862	.5029	.4337	.5017		.8738		-.2945	-.3007	-.2001	-.1584	-.1515	
305.000			.3659	.1635	.3257	.2464		-.0907		-.2050					
320.000			.4004	.1753	.4100	.3275		-.3817		-.3442	-.1333	-.0662	-.1538	-.0341	.0474
340.000			.4554	.1975	.3847	.5997		-.2002		-.4367					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	-.0164	.2976	.5860	.3010	-.3707	-.3735	-.2695			-.2339	-.2301				
40.000	-.0508	.1242	.2608	-.2205	-.4085	-.2863	-.4004			-.2298	-.2213				
70.000	-.0028	-.0837	-.1322	.0183	.0808	-.0037	-.1402								
90.000	.0198	-.0437	-.0904	.1158	.0341	-.0074	-.0735								
105.000			-.0480	.1731	-.0427	-.0637	-.0993								
110.000								-.2165							
120.000	-.0536	-.0628	.2116	.2037	.0353	-.0986	-.0773	-.1545							
135.000			.2781	.2597	.0316	.0186	.0353								
150.000	-.1050	-.0882	.2673	.2600	.0737	.1817	.0837								
165.000	-.1311		.2363		.4769	.3259	-.1914								
180.000	-.1469	-.1105	.2041	.2257											
320.000	.0238	.3358	.5624	.3891	-.2024	-.2829	-.2553								

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## 1A81A - PRESSURE SOURCE DATA TABULATION

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ARC11-019 1A81 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB12)

ALPHA( 2) = -4.180 BETA( 2) = -4.103

SECTION ( 1) ORBITER FUSELAGE		DEPENDENT VARIABLE CP													
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.3959	.9920	.4392	.2138	.3396	1.0363		-.1378		-.3102	-.0222	.0035	-.1040	-.2470	-.1537
20.000			.5183	.2880	.3281	.7468		-.3207		-.1829					
40.000			.7186	.3971	.3173	.5081		-.0955		-.3315	-.0796	-.1144	-.0109	-.1619	-.0869
55.000			.8088	.5519	.4243	.3714		.1674		.0197					
70.000			.8078	.5723	.4249	.3521		.2479		.1200	-.2416	-.1374	-.0632	-.0316	
90.000		.9538	.8015	.5890	.4332	.3733		.3173		.1532	-.1970	-.2281	-.1031	-.0372	
120.000			.7791	.6094	.4681	.4928		.5697		.1630	-.1129	-.3426	-.1582	-.0452	
140.000										.1298					
150.000			.7041	.5587	.4738	.5290				-.0964	-.3357	-.2164	-.1418	-.0819	
151.000									.7057						
156.000								.9556							
162.000									.7488						
165.000										-.1876	-.2820	-.1993	-.1427	-.1073	
169.000								.9972							
174.000						1.0894									
180.000	1.3959	.8390	.6111	.5281	.4588	.5265		.9176		-.2866	-.3189	-.1706	-.1507	-.1293	
305.000			.4518	.2104	.3053	.2741		-.0534		-.1625					
320.000			.4561	.1584	.3814	.3836		-.3297		-.3245	-.1051	-.0889	-.0963	.0028	.0499
340.000			.4759	.1603	.4135	.6394		-.2135		-.4123					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	-.0281	.2921	.5758	.7101	-.2301	-.2691	-.2410			-.1947	-.1904				
40.000	.0118	.1074	.2584	-.1273	-.3443	-.3254	-.4153			-.1907	-.1926				
70.000	-.0170	-.0946	-.1736	.0552	.0549	-.0249	-.1481								
90.000	.0059	-.0572	-.0735	.1013	.7231	-.0193	-.0797								
105.000			.0598	.1492	-.0732	-.0785	-.1101								
110.000								-.2249							
120.000	-.0405	-.0382	.2437	.1917	.0200	-.1175	-.1129	-.1763							
135.000			.3023	.3047	.0422	.0134	.0051								
150.000	-.0828	-.0413	.2959	.3107	.1017	.1511	.0639								
165.000	-.0859		.2748		.4341	.2706	-.2005								
180.000	-.0897	-.0602	.2606	.3283											
320.000	-.0216	.3045	.4886	.3471	-.2691	-.2042	-.2370								

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OF POOR QUALITY



ARC11-019 IA81 LVAP(ELHL SEALED) ORB. FUSELAGE

(RET812)

ALPHA( 2) = -4.157 BETA( 3) = -.002

SECTION ( 1) ORBITER FUSELAGE		DEPENDENT VARIABLE CP													
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.4531	1.0031	.4478	.1737	.2701	.9579		-.1852		-.3676	-.0384	.1015	.0031	-.0458	-.0244
20.000			.4753	.2083	.2658	.6680		-.3053		-.2545					
40.000			.5910	.2798	.2460	.4299		-.1745		-.3642	-.1141	.0047	-.0421	-.2136	-.1139
55.000			.6526	.3834	.3017	.2840		.0915		-.0524					
70.000			.6702	.4195	.3103	.2668		.1832		.0425	-.2963	-.2880	-.1176	-.0604	
90.000		.8053	.6806	.4551	.3165	.2784		.2486		.0713	-.2666	-.2978	-.1637	-.0663	
120.000			.6876	.5197	.3796	.4136		.4873		.0525	-.1989	-.4129	-.2362	-.0691	
140.000										-.0589					
150.000			.6696	.5432	.4415	.4998				-.1923	-.3330	-.2179	-.1591	-.1102	
151.000									.6286						
156.000								.8971							
162.000									.6887						
165.000										-.1911	-.3057	-.1702	-.1526	-.1384	
169.000								.9811							
174.000						1.0743									
180.000	1.4531	.8404	.6387	.5540	.4730	.5392		.9680		-.3205	-.3237	-.1232	-.1443	-.1443	
305.000			.6144	.3626	.3340	.3074		.0208		-.0747					
320.000			.5550	.2284	.3056	.4461		-.2297		-.3143	-.0465	-.1096	-.0610	-.0207	-.0461
340.000			.5188	.1696	.2800	.6841		-.3546		-.2187					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.0400	.2069	.3610	.2530	-.2589	-.2717	-.2512		-.2106	-.2075					
40.000	.0090	.1549	.2292	-.0701	-.2877	-.3079	-.3346		-.2096	-.2173					
70.000	-.0449	-.1239	-.0713	.1106	.0218	-.0553	-.1819								
90.000	-.0204	-.0846	.0689	.0927	-.0287	-.0522	-.1053								
105.000			.1710	.0995	-.1110	-.1070	-.1345								
110.000								-.2484							
120.000	-.0359	-.0302	.2103	.0567	-.0309	-.1757	-.2465	-.2208							
135.000			.2901	.2963	.0239	-.0376	-.0731								
150.000	-.0446	-.0184	.3019	.3418	.1195	.0493	-.0250								
165.000	-.0458		.3040		.3631	.1362	-.2320								
180.000	-.0452	-.0218	.3099	.4625											
320.000	.0028	.2255	.3848	.0886	-.2769	-.2459	-.2847								

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ARC11-019 IAB1 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB12)

ALPHA0( 2) = -4.134 BETA0( 4) = 4.138

SECTION ( 1) ORBITER FUSELAGE		DEPENDENT VARIABLE CP													
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.3981	.9499	.4605	.2543	.3410	1.0213		-.2028		-.2754	-.1755	.1046	.0566	-.0184	-.1032
20.000			.4341	.2324	.3120	.5976		-.2233		-.4072					
40.000			.4868	.2355	.2935	.3636		-.2609		-.2822	-.0715	-.0167	-.1306	-.2742	-.2339
55.000			.4957	.2602	.2521	.2714		.0267		-.1261					
70.000			.5180	.2839	.2204	.2293		.1353		-.0282	-.3587	-.3661	-.1849	-.0926	
90.000		.5994	.5460	.3308	.2176	.2278		.2014		-.0097	-.3336	-.3616	-.2031	-.1006	
120.000			.5884	.4286	.2910	.3315		.3986		-.0405	-.2683	-.4601	-.2881	-.1343	
140.000										-.1947					
150.000			.6085	.5063	.3979	.4459				-.2454	-.3330	-.1883	-.1957	-.1897	
151.000									.5258						
156.000								.8162							
162.000									.6109						
165.000										-.1984	-.3395	-.1401	-.1652	-.1511	
169.000								.9297							
174.000						1.0316									
180.000	1.3981	.8035	.6361	.5498	.4667	.5213		.9452		-.2968	-.3033	-.1732	-.1491	-.1261	
305.000			.7888	.5507	.4568	.3823		.0912		.0025					
320.000			.6645	.3767	.3605	.5004		-.1363		-.2519	.0529	-.2229	-.1049	-.0779	-.1418
340.000			.5670	.2793	.3430	.7381		-.3696		-.1770					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.0675	.2037	.3889	.2524	-.2373	-.2688	-.2521			-.2125	-.2094				
40.000	-.1351	.1913	.4226	.2521	-.3493	-.2296	-.2450			-.2155	-.2161				
70.000	-.0480	-.1313	-.0284	.1409	.0269	-.0715	-.1971								
90.000	-.0415	-.0906	.0841	.1224	-.0511	-.0838	-.1328								
105.000			.1421	.0334	-.1153	-.1344	-.1628								
110.000								-.2663							
120.000	-.0634	-.0537	.1733	-.0277	-.1125	-.2472	-.3473	-.2410							
135.000			.2394	.2439	-.0129	-.1103	-.1526								
150.000	-.0829	-.0627	.2521	.2732	.0753	-.0463	-.1140								
165.000	-.0823		.2577		.2818	.0538	-.2392								
180.000	-.0835	-.0611	.2678	.3404											
320.000	.0264	.1968	.2648	-.1405	-.2876	-.2685	-.3838								

ARC11-019 IAB1 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB12)

ALPHA( 2) = -4.123 BETA( 5) = 6.209

SECTION ( 1) ORBITER FUSELAGE		DEPENDENT VARIABLE CP													
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.3773	.9187	.4455	.2404	.2946	1.0081		-.2184		-.2422	-.2291	.0236	-.0944	-.0692	-.2089
20.000			.3901	.1978	.2795	.5438		-.2561		-.3813					
40.000			.3813	.1879	.2579	.3056		-.3177		-.3042	-.0814	-.0384	-.1785	-.2896	-.2593
55.000			.4033	.1963	.2125	.2275		-.0108		-.1682					
70.000			.4310	.2117	.1746	.1961		.1031		-.0654	-.3910	-.3954	-.2230	-.1004	
90.000		.4775	.4691	.2549	.1610	.1868		.1666		-.0496	-.3693	-.3971	-.2295	-.1152	
120.000			.5164	.3630	.2235	.2595		.3416		-.0932	-.3033	-.4861	-.3353	-.1696	
140.000										-.2560					
150.000			.5488	.4596	.3490	.3816				-.2756	-.3606	-.1841	-.2163	-.2129	
151.000									.4572						
156.000								.7587							
162.000									.5613						
165.000										-.2294	-.3544	-.1677	-.1801	-.1829	
169.000								.8940							
174.000							.9810								
180.000	1.3773	.7603	.6039	.5187	.4333	.4815		.9026		-.3097	-.2763	-.2036	-.1591	-.1529	
305.000			.8775	.6175	.4923	.3975		.1257		.0513					
320.000			.7108	.3989	.3362	.4834		-.0992		-.1993	.0825	-.2178	-.0716	-.194	-.1109
340.000			.5744	.2702	.3024	.7422		-.4178		-.1425					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.0271	.1622	.3438	.2601	-.2590	-.2783	-.2633		-.2151	-.2096					
40.000	-.1328	.1510	.4570	.3402	-.3694	-.2294	-.2544		-.2242	-.2230					
70.000	-.0549	-.1369	-.0453	.1653	.0109	-.0820	-.2144								
90.000	-.0556	-.1029	.0658	.1112	-.0296	-.1107	-.1756								
105.000			.1169	.0545	-.1348	-.1457	-.1877								
110.000															
120.000	-.0881	-.0679	.1203	-.0995	-.1611	-.2996	-.3971	-.2864							
135.000			.1746	.1701	-.0526	-.1585	-.2051	-.2535							
150.000	-.1276	-.1038	.1904	.1939	.0201	-.1127	-.1645								
165.000	-.1403		.1941		.2170	.0021	-.2507								
180.000	-.1539	-.1051	.2130	.2307											
320.000	.0236	.1710	.2628	-.1818	-.3046	-.2875	-.4002								

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ARC11-019 IAB1 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB12)

ALPHA0( 3) = -2.103 BETA0 ( 1) = -6.173

SECTION ( 1) ORBITER FUSELAGE				DEPENDENT VARIABLE CP											
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.3148	.9959	.4398	.2036	.2835	1.0256		-.1552		-.2760	-.0997	-.0688	-.0706	-.1809	-.1332
20.000			.5518	.2925	.2613	.7430		-.3441		-.1627					
40.000			.7910	.4336	.3113	.4937		-.0782		-.2767	-.0963	-.1456	.0159	-.1704	-.0385
55.000			.8901	.6148	.4610	.3564		.1682		.0446					
70.000			.8938	.6354	.4668	.3361		.2473		.1484	-.2209	-.0548	-.0378	-.0351	
90.000		1.0245	.8665	.6413	.4665	.3532		.3265		.1996	-.1695	-.2034	-.0823	-.0450	
120.000			.7762	.5913	.4372	.4128		.5834		.1939	-.0973	-.3229	-.1685	-.0753	
140.000										.1620					
150.000			.6553	.4944	.4073	.4250				-.0523	-.3618	-.2883	-.1870	-.1131	
151.000									.7198						
156.000								.9555							
162.000									.7478						
165.000										-.2215	-.3256	-.2340	-.1775	-.1440	
169.000								.9743							
174.000						1.0479									
180.000	1.3148	.7769	.5320	.4526	.3789	.4066		.8526		-.3128	-.3364	-.2327	-.1873	-.1780	
305.000			.3517	.1335	.2192	.2213		-.1078		-.2258					
320.000			.3981	.1156	.3427	.3149		-.3845		-.3636	-.1750	-.0984	-.1472	-.0157	.0422
340.000			.4536	.1400	.2781	.5941		-.1966		-.4426					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.0307	.3310	.6112	.3278	-.2715	-.2938	-.2644			-.1888	-.1933				
40.000	-.0348	.1263	.2769	-.1627	-.3651	-.2984	-.4235			-.1863	-.1857				
70.000	-.0308	-.1103	-.1583	-.1133	.0563	-.0179	-.1560								
90.000	.0029	-.0723	-.1203	.0962	.0090	-.0383	-.0971								
105.000			-.1040	.1731	-.0515	-.1291	-.1259								
110.000								-.2396							
120.000	-.0983	-.1117	.1611	.1768	.0263	-.1204	-.1263	-.1709							
135.000			.2416	.2055	.0013	-.0662	.0062								
150.000	-.1376	-.1154	.2290	.2024	-.0253	.1475	.0623								
165.000	-.1580		.2092		.4167	.2906	-.1833								
180.000	-.1620	-.1163	.1873	.1632											
320.000	.0870	.3872	.6105	.4452	-.2388	-.2585	-.2272								

ARC11-019 IA81 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB12)

ALPHA0( 3) = -2.089 BETA0 ( 2) = -2.072

## SECTION ( 1) ORBITER FUSELAGE

## DEPENDENT VARIABLE CP

X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.4850	1.0172	.4439	.1535	.2158	1.0096		-.1681		-.3786	-.0366	-.0769	-.0531	-.1924	-.1667
20.000			.4980	.2152	.2321	.7038		-.3579		-.2262					
40.000			.6572	.3201	.2398	.4482		-.1482		-.3771	-.1561	-.0103	-.0131	-.1184	-.0789
55.000			.7245	.4598	.3490	.2911		.0980		-.0406					
70.000			.7333	.4827	.3534	.2617		.1880		.0648	-.2763	-.2574	-.0979	-.0618	
90.000		.8810	.7305	.5074	.3537	.2717		.2690		.1041	-.2391	-.2765	-.1784	-.0673	
120.000			.6934	.5234	.3827	.3777		.5155		.1000	-.1722	-.3873	-.2444	-.0766	
140.000										.0517					
150.000			.6314	.4996	.4070	.4335				-.1573	-.3593	-.2511	-.1775	-.1105	
151.000									.6481						
156.000								.9027							
162.000									.6948						
165.000										-.2115	-.3264	-.2298	-.1788	-.1358	
169.000								.9565							
174.000							1.0715								
180.000	1.4850	.7655	.5669	.4947	.4139	.4444		.9123		-.3221	-.3447	-.1741	-.1803	-.1636	
305.000			.5279	.2639	.2512	.2558		-.0539		-.1446					
320.000			.5067	.1661	.2353	.3870		-.2942		-.2988	-.1134	-.1103	-.0509	.0125	.0449
340.000			.4969	.1247	.1892	.6329		-.2583		-.2948					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.0903	.2784	.4944	.2208	-.2334	-.2687	-.2432		-.1869	-.1850					
40.000	.0310	.1567	.2873	-.1153	-.2776	-.3023	-.3833		-.1866	-.1911					
70.000	-.0539	-.1423	-.1610	.0353	.0133	-.0553	-.1825								
90.000	-.0228	-.1046	-.0719	.0786	-.0293	-.0640	-.1138								
105.000			.0848	.1120	-.1254	-.1195	-.1463								
110.000								-.2517							
120.000	-.0598	-.0515	.2156	.1522	-.0146	-.1624	-.1974	-.2077							
135.000			.2634	.2751	.0234	-.0422	-.0556								
150.000	-.0651	-.0330	.2671	.2872	.0873	.0768	-.0063								
165.000	-.0623		.2634		.3316	.1836	-.2167								
180.000	-.0635	-.0429	.2634	.3628											
320.000	.0563	.3154	.4823	.3199	-.2693	-.2024	-.2489								

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ARC11-019 1A81 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB12)

ALPHA0 ( 3 ) = -2.053 BETA0 ( 3 ) = 2.068

## SECTION ( 1 ) ORBITER FUSELAGE

## DEPENDENT VARIABLE CP

X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.4503	1.0126	.4539	.1795	.2805	1.0036		-.1947		-.3412	-.1393	.0890	.0316	-.0466	-.0159
20.000			.4558	.1807	.2499	.6270		-.2339		-.4082					
40.000			.5368	.2283	.2350	.3817		-.2463		-.3121	-.0940	-.0221	-.0765	-.2149	-.1920
55.000			.5737	.3071	.2366	.2297		.0204		-.1158					
70.000			.5870	.3346	.2394	.2066		.1326		-.0082	-.3422	-.3490	-.1701	-.0901	
90.000		.6971	.6027	.3767	.2486	.2050		.2064		.0212	-.3084	-.3444	-.2242	-.0960	
120.000			.6074	.4437	.3071	.3018		.4334		-.0016	-.2532	-.4507	-.2755	-.1037	
140.000										-.1433					
150.000			.5980	.4821	.3789	.3951				-.2429	-.3568	-.2504	-.2044	-.1843	
151.000									.5577						
156.000								.8285							
162.000									.6293						
165.000										-.2206	-.3552	-.1781	-.1853	-.1799	
169.000								.9330							
174.000						1.0253									
180.000	1.4503	.7582	.5873	.5077	.4223	.4397		.9314		-.3375	-.3456	-.1710	-.1766	-.1533	
305.000			.7099	.4591	.3820	.3270		.0160		-.0642					
320.000			.6252	.3030	.3015	.4699		-.2033		-.3726	-.0087	-.2174	-.0920	.0085	-.1419
340.000			.5467	.2026	.3015	.7127		-.4104		-.2218					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.0779	.2390	.3575	.2294	-.2446	-.2614	-.2406		-.2036	-.2033					
40.000	.0237	.2347	.4029	.2164	-.3568	-.2512	-.2682		-.2060	-.2161					
70.000	-.0722	-.1487	-.0931	.0964	-.0049	-.0833	-.2050								
90.000	-.0509	-.1020	.0482	.0791	-.0675	-.0967	-.1343								
105.000			.1450	.0708	-.1415	-.1360	-.1665								
110.000								-.2732							
120.000	-.0568	-.0458	.1772	-.0098	-.0749	-.2183	-.3045	-.2323							
135.000			.2473	.2472	-.0080	-.0931	-.1284								
150.000	-.0633	-.0455	.2600	.2751	.0682	-.0190	-.0878								
165.000	-.0673		.2650		.2909	.0712	-.2314								
180.000	-.0670	-.0461	.2665	.3733											
320.000	.0561	.2304	.2801	-.0554	-.2852	-.2766	-.3532								

ARC11-019 IAB1 LVAP (ELHL SEALED) ORB. FUSELAGE

(RETB12)

ALPHA0 ( 3 ) = -2.034 BETA0 ( 4 ) = 6.180

## SECTION ( 1 ) ORBITER FUSELAGE

## DEPENDENT VARIABLE CP

X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.3819	.9673	.4440	.1860	.2462	.9965		-.2322		-.2611	-.2545	-.1053	-.0513	-.0624	-.1789
20.000			.3851	.1492	.2354	.5361		-.2698		-.4000					
40.000			.3716	.1541	.2098	.2899		-.3360		-.3236	-.1344	-.0739	-.1767	-.2061	-.1629
55.000			.3842	.1684	.1647	.1970		-.0375		-.1850					
70.000			.4109	.1851	.1372	.1530		.0877		-.0749	-.4025	-.4202	-.2432	-.1202	
90.000		.4506	.4506	.2357	.1372	.1434		.1629		-.0502	-.3780	-.4085	-.2667	-.1307	
120.000			.4834	.3334	.2041	.1967		.3358		-.0947	-.3209	-.4953	-.3452	-.1696	
140.000										-.2613					
150.000			.5017	.4165	.3108	.2992			.4385	-.2930	-.3836	-.2135	-.2438	-.2343	
151.000															
156.000								.7440							
162.000									.5362						
165.000										-.2554	-.3814	-.1978	-.2117	-.2028	
169.000								.8699							
174.000							.9800								
180.000	1.3819	.6948	.5461	.4669	.3849	.3747		.8705		-.3296	-.3153	-.2358	-.1910	-.1786	
305.000			.8791	.6072	.4725	.3715		.0936		.0241					
320.000			.7252	.3831	.2868	.4666		-.1120		-.2362	.0663	-.2138	-.0680	-.1796	-.1041
340.000			.5800	.2323	.2431	.7365		-.4464		-.1676					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.0351	.1956	.3639	.2647	-.2520	-.2693	-.2526		-.2036	-.2036					
40.000	-.0936	.2541	.4997	.3918	-.3704	-.2164	-.2430		-.2118	-.2136					
70.000	-.0602	-.1338	-.0701	.1395	-.0081	-.0987	-.2223								
90.000	-.0546	-.0951	.0505	.0962	-.0418	-.1188	-.1839								
105.000			.1194	.0715	-.1398	-.1580	-.2003								
110.000								-.2997							
120.000	-.0818	-.0373	.1203	-.0777	-.1475	-.2851	-.3888	-.2520							
135.000			.1599	.1485	-.0576	-.1628	-.2136								
150.000	-.1332	-.0812	.1701	.1637	.0079	-.1232	-.1724								
165.000	-.1517		.1757		.1730	-.0142	-.2436								
180.000	-.1765	-.1168	.1859	.1581											
320.000	.0373	.2013	.2684	-.1577	-.2813	-.2829	-.3941								

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ARC11-019 IAB1 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB12)

ALPHA0(4) = .003 BETA0(1) = -6.180

SECTION (1) ORBITER FUSELAGE		DEPENDENT VARIABLE CP													
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.4094	1.0061	.4260	.1660	.2195	1.0374		-.1752		-.2891	-.1198	-.1765	-.0324	-.1598	-.1436
20.000			.5426	.2631	.1991	.7334		-.3767		-.1802					
40.000			.7886	.4158	.2835	.4924		-.0994		-.2909	-.1369	-.1921	.0343	-.1416	-.0398
55.000			.8955	.6007	.4402	.3202		.1339		.0306					
70.000			.8926	.6211	.4446	.2849		.1955		.1283	-.2079	-.0941	-.0751	-.0482	
90.000		1.0326	.8501	.6199	.4350	.3064		.2787		.1887	-.1759	-.1883	-.1620	-.0590	
120.000			.7208	.5410	.3832	.3442		.5612		.1738	-.1189	-.3249	-.2294	-.1176	
140.000										.1391					
150.000			.5924	.4368	.3545	.3389				-.0773	-.3911	-.3218	-.2149	-.1482	
151.000									.6872						
156.000								.9233							
162.000									.7122						
165.000										-.2522	-.3561	-.2693	-.2019	-.1795	
169.000								.9356							
174.000							1.0337								
180.000	1.4094	.7003	.4688	.3994	.3295	.3180		.8116		-.3372	-.3731	-.2631	-.2155	-.2102	
305.000			.3370	.1051	.1788	.2025		-.1576		-.2507					
320.000			.3861	.0723	.1872	.3036		-.4061		-.3852	-.1992	-.1682	-.1407	-.0243	.0203
340.000			.4433	.0921	.1781	.5820		-.2192		-.4389					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.0724	.3695	.6368	.3538	-.2493	-.2960	-.2381		-.1796	-.1799					
40.000	.0569	.1675	.3009	-.1291	-.3437	-.3106	-.4271		-.1577	-.1577					
70.000	-.0491	-.1377	-.1873	-.1941	.0013	-.0495	-.1749								
90.000	-.0196	-.0993	-.1557	.0529	-.0210	-.0804	-.1195								
105.000			-.1402	.1322	-.0699	-.1599	-.1613								
110.000								-.2626							
120.000	-.1426	-.1557	.1248	.1429	.0062	-.1350	-.1762	-.2031							
135.000			.2099	.1763	-.0182	-.1254	-.0243								
150.000	-.1715	-.1433	.2083	.1813	-.0826	.1145	.0333								
165.000	-.1829		.1932		.4009	.2719	-.1932								
180.000	-.1749	-.1105	.1758	.1825											
320.000	.1278	.4476	.6513	.4984	-.2840	-.2022	-.2152								

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ARC11-019 1A81 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB12)

ALPHA0( 4) = .006 BETA0 ( 2) = -4.126

SECTION ( 1) ORBITER FUSELAGE				DEPENDENT VARIABLE CP											
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.4612	1.0234	.4352	.1378	.2027	1.0169		-.1601		-.3200	-.0663	-.1428	-.0497	-.1793	-.1693
20.000			.5228	.2244	.1922	.7141		-.3808		-.1831					
40.000			.7231	.3626	.2531	.4636		-.1271		-.3243	-.1512	-.1791	-.0258	-.0420	-.0769
55.000			.8066	.5255	.3903	.2911		.0988		-.0119					
70.000			.8047	.5462	.3919	.2564		.1708		.0851	-.2457	-.1621	-.1189	-.0661	
90.000		.9440	.7741	.5542	.3857	.2723		.2536		.1389	-.2067	-.2309	-.2024	-.0698	
120.000			.6888	.5153	.3667	.3348		.5311		.1268	-.1537	-.3558	-.2207	-.1023	
140.000										.0896					
150.000			.5892	.4507	.3620	.3538				-.1347	-.3858	-.3014	-.2025	-.1402	
151.000									.6620						
156.000								.9037							
162.000									.6944						
165.000										-.2395	-.3399	-.2655	-.1960	-.1662	
169.000								.9343							
174.000						1.0496									
180.000	1.4612	.6980	.4976	.4305	.3539	.3482		.8536		-.3349	-.3737	-.2399	-.2093	-.1847	
305.000			.4330	.1776	.1824	.2217		-.1185		-.2122					
320.000			.4500	.1087	.1861	.3473		-.3481		-.3594	-.1555	-.1755	-.0488	.0086	.0179
340.000			.4704	.0920	.1324	.6060		-.2260		-.4266					
X/L9															
.000	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1242	.3573	.5835	.3763	-.2504	-.2592	-.2378		-.1753	-.1774					
40.000	.0683	.1742	.3125	-.0956	-.3071	-.3233	-.4162		-.1470	-.1452					
70.000	-.0556	-.1424	-.1829	-.0746	.0017	-.0541	-.1789								
90.000	-.0204	-.1072	-.1496	.0739	-.0392	-.0758	-.1263								
105.000			-.1128	.1448	-.0931	-.1706	-.1585								
110.000								-.2617							
120.000	-.1075	-.1131	.1986	.1591	-.0098	-.1526	-.1771	-.2106							
135.000			.2513	.2272	-.0123	-.0702	-.0520								
150.000	-.1174	-.0742	.2454	.2340	.0029	.0841	.0047								
165.000	-.1106		.2353		.3409	.2018	-.2137								
180.000	-.1032	-.0449	.2226	.2492											
320.000	.0960	.4054	.5883	.4286	-.2988	-.1836	-.2245								

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## IAB1A - PRESSURE SOURCE DATA TABULATION

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ARC11-019 IAB1 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB12)

ALPHA0 ( 4 ) = .015 BETA0 ( 3 ) = -.027

## SECTION ( 1 ) ORBITER FUSELAGE

## DEPENDENT VARIABLE CP

X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.4748	1.0311	.4388	.1123	.1645	.9275		-.1995		-.3871	-.0736	-.1092	.0600	.0013	.0045
20.000			.4728	.1512	.1633	.6295		-.3395		-.3067					
40.000			.5989	.2448	.1482	.3814		-.2074		-.4183	-.1523	-.1005	-.0203	-.2087	-.1096
55.000			.6455	.3626	.2616	.2158		.0184		-.1012					
70.000			.6518	.3879	.2730	.1768		.1137		.0157	-.3253	-.2887	-.1553	-.0873	
90.000		.7933	.6537	.4213	.2798	.1871		.2170		.0541	-.2881	-.3128	-.2495	-.0913	
120.000			.6235	.4503	.3128	.2776		.4670		.0334	-.2373	-.4243	-.2729	-.0997	
140.000										-.0661					
150.000			.5700	.4481	.3546	.3372				-.2289	-.3905	-.2791	-.2118	-.1516	
151.000									.5880						
156.000								.8515							
162.000									.6391						
165.000										-.2398	-.3697	-.2399	-.2115	-.1745	
165.000								.9258							
174.000						1.0421									
180.000	1.4748	.7055	.5231	.4522	.3777	.3656		.9063		-.3800	-.3768	-.1871	-.2068	-.1782	
305.000			.5920	.3299	.3009	.2542		-.0425		-.1288					
320.000			.5532	.1976	.2186	.4015		-.2559		-.3315	-.0912	-.1933	-.0224	.0085	-.0001
340.000			.5103	.1114	.1930	.6552		-.4010		-.2435					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1214	.2710	.4046	.2748	-.2268	-.2444	-.2314		-.2027	-.2005					
40.000	.0880	.2216	.2809	.0136	-.2836	-.3305	-.3499		-.1865	-.2033					
70.000	-.0780	-.1667	-.1800	.0077	-.0209	-.0847	-.1958								
90.000	-.0461	-.1163	-.0616	.0562	-.0755	-.1014	-.1395								
105.000			.1097	.0834	-.1669	-.1474	-.1698								
110.000															
120.000	-.0647	-.0440	.1913	.1360	-.0313	-.1748	-.2465	-.2697							
135.000			.1879	.2444	.0539	-.0575	-.1060	-.2261							
150.000	-.0628	-.0152	.2006	.2706	.0832	.0195	-.0599								
165.000	-.0619		.2309		.2781	.0938	-.2196								
180.000	-.0638	-.0251	.2479	.3765											
320.000	.0985	.3038	.4253	.1678	-.2861	-.2447	-.2917								

ARC11-019 IAB1 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB12)

ALPHA( 4) = .024 BETA( 4) = 4.105

## SECTION ( 1) ORBITER FUSELAGE

## DEPENDENT VARIABLE CP

X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.3967	1.0261	.4539	.1593	.2189	1.0168		-.2296		-.2999	-.2003	-.0931	.0358	.0030	.0057
20.000			.4234	.1448	.1970	.5771		-.2685		-.4340					
40.000			.4524	.1772	.1896	.3282		-.2975		-.3336	-.1520	-.1470	-.0978	-.1023	-.0818
55.000			.4700	.2226	.1695	.2060		-.0502		-.1678					
70.000			.4813	.2454	.1646	.1493		.0869		-.0554	-.3790	-.3967	-.2320	-.1197	
90.000		.5504	.5087	.2905	.1766	.1393		.1737		-.0171	-.3505	-.3872	-.2981	-.1237	
120.000			.5184	.3639	.2337	.2060		.3831		-.0522	-.3016	-.4901	-.3253	-.1420	
140.000										-.2065					
150.000			.5156	.4161	.3114	.2856				-.2812	-.3874	-.2635	-.2530	-.2268	
151.000									.4875						
156.000								.7728							
162.000								.5625							
165.000										-.2468	-.3920	-.2113	-.2279	-.2024	
169.000								.8778							
174.000							.9470								
180.000	1.3967	.6654	.5231	.4476	.3650	.3236		.8886		-.3453	-.3641	-.2425	-.2149	-.1835	
305.000			.8039	.5245	.4140	.3052		.0283		-.0451					
320.000			.6868	.3263	.2584	.4396		-.1594		-.2827	.0271	-.2790	-.0860	.0236	-.1437
340.000			.5704	.1893	.2206	.7081		-.4182		-.2062					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.0991	.2583	.4101	.2911	-.2312	-.2602	-.2339		-.1912	-.1930					
40.000	.0224	.2818	.4992	.3688	-.3530	-.2237	-.2392		-.1967	-.2049					
70.000	-.0660	-.1510	-.1111	.0679	-.0212	-.1053	-.2212								
90.000	-.0413	-.0997	.0240	.0661	-.0763	-.1316	-.1720								
105.000			.1278	.0818	-.1576	-.1681	-.1974								
110.000								-.2968							
120.000	-.0564	-.0261	.1161	-.0321	-.1044	-.2457	-.3448	-.2453							
135.000			.2021	.1964	-.0243	-.1323	-.1800								
150.000	-.0833	-.0280	.2129	.2193	.0518	-.0710	-.1469								
165.000	-.0954		.2120		.1838	.0095	-.2444								
180.000	-.1096	-.0539	.2207	.2654											
320.000	.0988	.2456	.2918	-.1078	-.2652	-.2655	-.3782								

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## IAB1A - PRESSURE SOURCE DATA TABULATION

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ARC11-019 IAB1 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB12)

ALPHA0( 4) = .038 BETA0 ( 5) = 6.165

SECTION ( 1) ORBITER FUSELAGE				DEPENDENT VARIABLE CP											
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.3616	.9977	.4368	.1472	.1803	1.0009		-.2554		-.2739	-.2814	-.1775	.0444	-.0427	-.1237
20.000			.3751	.1095	.1772	.5258		-.2901		-.4179					
40.000			.3572	.1228	.1581	.2722		-.3526		-.3535	-.1515	-.1462	-.1435	-.0740	-.0152
55.000			.3688	.1463	.1157	.1638		-.0981		-.2077					
70.000			.3908	.1636	.1049	.1120		.0594		-.0916	-.4081	-.4301	-.2650	-.1287	
90.000		.4216	.4276	.2171	.1126	.0979		.1458		-.0554	-.3821	-.4164	-.3107	-.1299	
120.000			.4553	.3079	.1735	.1476		.3327		-.0954	-.3328	-.5045	-.3546	-.1704	
140.000															
150.000			.4597	.3750	.2684	.2173									
151.000									.4210						
156.000								.7212							
162.000									.5086						
165.000										-.2764	-.4025	-.2257	-.2387	-.2258	
169.000								.8398							
174.000							.9379								
180.000	1.3616	.6248	.4947	.4177	.3346	.2916		.8373		-.3477	-.3458	-.2644	-.2186	-.2076	
305.000			.8795	.6004	.4502	.3385		.0625		-.0077					
320.000			.7276	.3713	.2484	.4497		-.1269		-.2343	.0565	-.2508	-.0613	-.1525	-.0913
340.000			.5790	.1967	.1619	.7230		-.4640		-.1686					
X/LB	.6520	.7290	.7790	.6210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.0928	.2404	.3961	.2821	-.2376	-.2629	-.2425		-.1892	-.1892					
40.000	.0127	.3255	.5573	.4561	-.3576	-.2036	-.2329		-.1992	-.2025					
70.000	-.0588	-.1469	-.0964	.0896	-.0145	-.1106	-.2295								
90.000	-.0402	-.0955	.0294	.0822	-.0642	-.1334	-.1914								
105.000			.1171	.0983	-.1480	-.1656	-.2082								
110.000															
120.000	-.0652	-.0154	.1304	-.0531	-.1306	-.2766	-.3800		-.3026						
135.000			.1487	.1379	-.0602	-.1664	-.2174		-.2564						
150.000	-.1191	-.0198	.1616	.1490	-.0098	-.1341	-.1864								
165.000	-.1515		.1712		.1648	-.0350	-.2471								
180.000	-.1905	-.1081	.1814	.1768											
320.000	.0922	.2404	.2929	-.1474	-.2602	-.2751	-.3853								

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ARC11-019 IA81 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB12)

ALPHA( 5) = 2.130 BETA( 1) = -6.171

SECTION ( 1) ORBITER FUSELAGE		DEPENDENT VARIABLE CP													
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.4175	1.0103	.4253	.1346	.1630	1.0089		-.1715		-.2678	-.1322	-.2268	-.0517	-.1362	-.1296
20.000			.5453	.2388	.1463	.7219		-.3831		-.1580					
40.000			.7909	.4085	.2634	.4966		-.0666		-.2328	-.1474	-.1872	.0511	-.0846	-.0220
55.000			.8917	.5872	.4309	.2916		.1409		.0381					
70.000			.8794	.6076	.4297	.2471		.1864		.1300	-.2014	-.1125	-.1129	-.0605	
90.000		1.0337	.8400	.5998	.4142	.2680		.2399		.2181	-.1683	-.1837	-.1744	-.0759	
120.000			.6939	.5065	.3406	.2967		.5669		.1678	-.1181	-.3344	-.2885	-.1550	
140.000										.1272					
150.000			.5362	.3782	.3022	.2793				-.0798	-.4128	-.3496	-.2434	-.1815	
151.000									.6750						
156.000								.9148							
162.000									.6929						
165.000										-.2841	-.3772	-.2958	-.2242	-.2131	
169.000								.9151							
174.000						1.0402									
180.000	1.4175	.6428	.4140	.3530	.2791	.2559		.7809		-.3579	-.3933	-.2887	-.2338	-.2369	
305.000			.3245	.0786	.1368	.1857		-.1799		-.2739					
320.000			.3794	.0431	.1262	.2914		-.4110		-.3926	-.2141	-.2010	-.1365	-.0446	.0501
340.000			.4345	.0625	.1141	.5638		-.2186		-.4118					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.0686	.4157	.6610	.3868	-.2811	-.3090	-.2155		-.1800	-.1845					
40.000	.1057	.2287	.3458	-.1226	-.3461	-.2571	-.3757		-.1182	-.1590					
70.000	-.0464	-.1532	-.2078	-.2342	-.0429	-.0703	-.1901								
90.000	-.0165	-.1161	-.1797	.0176	-.0454	-.1154	-.1455								
105.000			-.1692	.1044	-.0816	-.1776	-.2034								
110.000								-.2769							
120.000	-.1791	-.2026	.1209	.1031	-.0075	-.1529	-.1905	-.2227							
135.000			.1705	.1516	-.0282	-.1327	-.0483								
150.000	-.1943	-.1550	.1776	.1612	-.0529	.0804	-.0027								
165.000	-.1946		.1767		.3990	.2540	-.2078								
180.000	-.1584	-.0632	.1693	.2042											
320.000	.1421	.5117	.6840	.5393	-.2670	-.2114	-.2249								

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## IAB1A - PRESSURE SOURCE DATA TABULATION

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ARC11-019 IAB1 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB12)

ALPHA0 ( 5) = 2.133 BETA0 ( 2) = -2.078

SECTION ( 1) ORBITER FUSELAGE		DEPENDENT VARIABLE CP													
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.4615	1.0461	.4279	.0802	.1037	.9390		-.1972		-.3339	-.0718	-.2006	-.0054	.0420	.0357
20.000			.4928	.1559	.1089	.6654		-.4139		-.1832					
40.000			.6555	.2916	.1726	.4088		-.1645		-.3574	-.2039	-.1618	-.0527	-.0419	-.0553
55.000			.7144	.4348	.3130	.2141		.0426		-.0365					
70.000			.7084	.4536	.3151	.1720		.1034		.0525	-.2663	-.2105	-.2044	-.1026	
90.000		.8503	.6930	.4669	.3080	.1938		.1865		.1034	-.2474	-.2697	-.2595	-.1007	
120.000			.6211	.4471	.3040	.2656		.4861		.0711	-.2027	-.3873	-.2728	-.1261	
140.000										.0203					
150.000			.5278	.3989	.3146	.2881				-.2033	-.4136	-.3118	-.2214	-.1729	
151.000									.6083						
156.000								.8722							
162.000									.6418						
165.000										-.2632	-.3928	-.2895	-.2260	-.1946	
169.000								.9125							
174.000						1.0539									
180.000	1.4615	.6722	.4521	.3946	.3236	.2856		.8607		-.3885	-.3981	-.2344	-.2344	-.1986	
305.000			.4915	.2221	.2069	.1997		-.1097		-.1807					
320.000			.4919	.1160	.1504	.3377		-.3131		-.2774	-.1432	-.2208	-.0487	.0208	.0326
340.000			.4814	.0564	.0983	.5798		-.3115		-.2827					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1428	.3322	.5254	.2485	-.2185	-.2562	-.2287		-.1806	-.1742					
40.000	.1053	.2251	.3339	-.0820	-.2522	-.3422	-.4056		-.1590	-.1614					
70.000	-.0767	-.1797	-.2113	-.0581	-.0344	-.0919	-.2039								
90.000	-.0429	-.1432	-.1626	.0474	.0774	-.1161	-.1580								
105.000			-.0739	.1157	-.1383	-.2101	-.1974								
110.000								-.2817							
120.000	-.1135	-.0968	.1903	.1465	-.0529	-.1930	-.2330	-.2401							
135.000			.2435	.2203	-.0474	-.1230	-.1084								
150.000	-.0856	-.0018	.2253	.2190	-.0384	.0137	-.0551								
165.000	-.0776		.2151		.2552	.1054	-.2318								
180.000	-.0699	.0325	.2253	.2565											
320.000	.1053	.3769	.5183	.3490	-.2940	-.1915	-.2435								

ARC11-019 1A81 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB12)

ALPHA( 5) = 2.141 BETA( 3) = 2.056

## SECTION ( 1) ORBITER FUSELAGE

## DEPENDENT VARIABLE CP

X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.4415	1.0474	.4578	.1389	.2000	.9785		-.2247		-.3397	-.1397	-.1673	.0205	.0065	.0401
20.000			.4562	.1466	.1861	.5983		-.2716		-.4238					
40.000			.5346	.2093	.1863	.3515		-.2635		-.3907	-.1121	-.1329	-.0046	-.0364	-.1162
55.000			.5613	.2887	.2102	.1765		-.0411		-.1472					
70.000			.5607	.3048	.2127	.1487		.0468		-.0260	-.3360	-.3369	-.2298	-.1060	
90.000		.6637	.5683	.3400	.2167	.1452		.1600		.0180	-.3118	-.3510	-.3105	-.1050	
120.000			.5472	.3777	.2498	.2114		.4184		-.0112	-.2793	-.4548	-.2997	-.1214	
140.000										-.1440					
150.000			.5056	.3944	.3016	.2631				-.2719	-.4097	-.3096	-.2432	-.1941	
151.000									.5263						
156.000								.7909							
162.000									.5808						
165.000										-.2638	-.3982	-.2440	-.2395	-.2031	
169.000								.8778							
174.000							.9937								
180.000	1.4415	.6256	.4798	.4147	.3347	.2903		.8682		-.3827	-.3899	-.2326	-.2305	-.1947	
305.000			.7080	.4332	.3518	.2669		-.0281		-.0703					
320.000			.6381	.2741	.2376	.4207		-.2110		-.3406	-.0400	-.2910	-.0686	.1118	-.0569
340.000			.5541	.1583	.2164	.6793		-.4433		-.2038					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1536	.3046	.4107	.2764	-.2173	-.2448	-.2336		-.1852	-.1931					
40.000	.1159	.2985	.4512	.2550	-.3277	-.2359	-.2665		-.1874	-.1995					
70.000	-.0853	-.1802	-.1878	-.0047	-.0386	-.1051	-.2147								
90.000	-.0449	-.1274	-.0551	.0472	-.0992	-.1230	-.1670								
105.000			.0940	.0812	-.1882	-.1747	-.2011								
110.000								-.2798							
120.000	-.0591	-.0359	.1682	.1129	-.0739	-.2172	-.2907	-.2334							
135.000			.1870	.1670	-.0278	-.1156	-.1534								
150.000	-.0588	.0216	.2136	.1936	.0077	-.0570	-.1172								
165.000	-.0637		.2105		.1994	.0226	-.2318								
180.000	-.0699	.0655	.2049	.2338											
320.000	.1529	.2842	.3364	.0078	-.2993	-.2547	-.3498								

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## IABIA - PRESSURE SOURCE DATA TABULATION

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ARC11-019 IAB1 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB12)

ALPHA0( 5) = 2.152 BETA0 ( 4) = 6.169

## SECTION ( 1) ORBITER FUSELAGE

## DEPENDENT VARIABLE CP

X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.4036	1.0031	.4296	.1136	.1306	.9780		-.2629		-.2621	-.2981	-.2751	.0576	-.0154	.0001
20.000			.3641	.0774	.1334	.5102		-.2900		-.4228					
40.000			.3411	.0975	.1229	.2608		-.3659		-.3693	-.1198	-.2255	-.1094	-.0865	.0375
55.000			.3480	.1257	.0892	.1444		-.1224		-.2243					
70.000			.3685	.1442	.0799	.0911		-.0014		-.1005	-.4106	-.4239	-.2961	-.1139	
90.000		.3921	.4075	.1930	.0895	.0764		.1306		-.0574	-.3880	-.4220	-.3564	-.2240	
120.000			.4239	.2762	.1532	.1157		.3241		-.1018	-.3458	-.5163	-.3540	-.1675	
140.000										-.2770					
150.000			.4151	.3324	.2355	.1753				-.3306	-.4258	-.2711	-.2878	-.2709	
151.000									.4059						
156.000								.7220							
162.000									.4861						
165.000										-.3021	-.4258	-.2510	-.2584	-.2450	
169.000								.8190							
174.000							.9275								
180.000	1.4036	.5495	.4349	.3683	.2876	.2399		.8075		-.3731	-.3719	-.2918	-.2383	-.2338	
305.000			.8838	.5942	.4398	.3010		.0736		.0197					
320.000			.7333	.3630	.2286	.4435		-.1101		-.2252	.0238	-.2655	-.0571	-.0914	.0710
340.000			.5747	.1733	.1073	.7092		-.4668		-.1526					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1269	.2854	.4189	.2831	-.2336	-.2570	-.2373		-.1765	-.1792					
40.000	.0669	.3806	.6046	.5055	-.3519	-.1946	-.2308		-.1953	-.2032					
70.000	-.0672	-.1609	-.1539	.0120	-.0352	-.1254	-.2404								
90.000	-.0373	-.1000	-.0295	.0581	-.0952	-.1548	-.2045								
105.000			.0726	.1070	-.1786	-.1835	-.2239								
110.000								-.2914							
120.000	-.0595	-.0121	.1243	.0275	-.1254	-.2667	-.3657	-.2580							
135.000			.1364	.1412	-.0507	-.1738	-.2236								
150.000	-.0951	.0259	.1379	.1545	-.0176	-.1466	-.2017								
165.000	-.1281		.1485		.1137	-.0621	-.2509								
190.000	-.1819	-.0462	.1602	.1807											
320.000	.1340	.2670	.3106	-.1384	-.2503	-.2639	-.3731								

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OF POOR QUALITY



ARC11-019 1A81 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETS12)

ALPHA( 6) = 4.219 BETA( 1) = -6.158

## SECTION ( 1) ORBITER FUSELAGE

## DEPENDENT VARIABLE CP

X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.3988	1.0198	.4222	.1010	.1043	.9770		-.1633		-.2600	-.1253	-.2395	-.0699	-.1197	-.0846
20.000			.5510	.2174	.0981	.7139		-.3824		-.1586					
40.000			.7967	.4018	.2482	.5107		-.0545		-.2433	-.1585	-.1955	.0504	-.0276	-.0246
55.000			.8817	.5816	.4199	.2825		.1543		.0208					
70.000			.8628	.5915	.4119	.2396		.1935		.1269	-.1995	-.1270	-.1236	-.0839	
90.000		1.0157	.8178	.5785	.3906	.2337		.2229		.2259	-.1660	-.1842	-.1885	-.1024	
120.000			.6715	.4701	.2950	.2458		.5873		.1752	-.1220	-.3391	-.3320	-.2164	
140.000										.1212					
150.000			.4924	.3206	.2516	.2237				-.0689	-.4407	-.3799	-.2749	-.2081	
151.000									.6747						
156.000								.9171							
162.000									.6803						
165.000										-.3200	-.4004	-.3279	-.2545	-.2359	
169.000								.9146							
174.000						1.0218									
180.000	1.3988	.6273	.3546	.3075	.2323	.2018		.7671		-.3824	-.4063	-.3113	-.2566	-.2542	
305.000			.3124	.0438	.0959	.1619		-.1975		-.3076					
320.000			.3712	.0052	.0799	.2677		-.4175		-.3244	-.2448	-.1440	-.0767	-.0302	.0617
340.000			.4287	.0212	.0518	.5336		-.2034		-.3200					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1604	.4291	.6716	.3922	-.2839	-.3084	-.2057		-.1762	-.1765					
40.000	.1350	.2478	.3621	-.1450	-.3420	-.2540	-.3588		-.1005	-.1593					
70.000	-.0658	-.1800	-.2317	-.2617	-.0789	-.0873	-.1973								
90.000	-.0315	-.1413	-.2073	-.0160	-.0724	-.1377	-.1599								
105.000			-.1943	.0639	-.0987	-.1872	-.2215								
110.000								-.2778							
120.000	-.2279	-.2662	.0874	.0615	-.0230	-.1580	-.1965	-.2302							
135.000			.1089	.1206	-.0221	-.1237	-.0687								
150.000	-.2125	-.1445	.1244	.1466	-.0007	.0514	-.0282								
165.000	-.1853		.1367		.3623	.2203	-.2116								
180.000	-.1401	.0384	.1238	.1834											
320.000	.2005	.5179	.6832	.5254	-.2821	-.2150	-.2259								

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## IAB1A - PRESSURE SOURCE DATA TABULATION

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ARC11-019 IAB1 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB12)

ALPHA0( 6) = 4.218 BETA0 ( 2) = -4.108

## SECTION ( 1) ORBITER FUSELAGE

## DEPENDENT VARIABLE CP

X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.4253	1.0448	.4272	.0757	.0818	.9659		-.1724		-.2812	-.0596	-.2303	.0233	.0292	-.0108
20.000			.5256	.1806	.0710	.6853		-.3666		-.1725					
40.000			.7302	.3453	.2044	.4541		-.0874		-.1803	-.1902	-.1779	.0048	-.0033	.0006
53.000			.8021	.5087	.3629	.2354		.1116		-.0088					
70.000			.7845	.5195	.3588	.1831		.1525		.0933	-.2278	-.1630	-.1704	-.1039	
90.000		.9215	.7435	.5130	.3421	.1997		.1903		.1800	-.1999	-.2285	-.2381	-.1048	
120.000			.6325	.4440	.2851	.2434		.5443		.1244	-.1602	-.3631	-.3272	-.1775	
140.000										.0673					
150.000			.4928	.3434	.2679	.2400				-.1756	-.4326	-.3684	-.2542	-.1949	
151.000									.6377						
156.000								.8941							
162.000									.6585						
165.000										-.2963	-.3888	-.3133	-.2409	-.2150	
169.000								.9090							
174.000							1.0277								
180.000	1.4253	.6389	.3868	.3366	.2641	.2275		.8149		-.3869	-.4109	-.2786	-.2515	-.2259	
305.000			.3947	.1153	.1198	.1681		-.1592		-.2473					
320.000			.4264	.0388	.1035	.2962		-.3666		-.2737	-.1971	-.2109	-.0457	.0043	.0798
340.000			.4515	.0205	.0298	.5468		-.2456		-.2045					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1835	.3892	.6086	.3144	-.2602	-.3057	-.2335			-.1757	-.1888				
40.000	.1102	.2141	.3488	-.1241	-.3029	-.2764	-.3545			-.1441	-.1760				
70.000	-.0767	-.1906	-.2373	-.1470	-.0882	-.0975	-.2047								
90.000	-.0443	-.1578	-.2057	.0027	-.0978	-.1306	-.1615								
105.000			-.1637	.0624	-.1185	-.1968	-.2155								
110.000										-.2941					
120.000	-.1891	-.2023	.1577	.0984	-.0124	-.1789	-.2385			-.2491					
135.000			.2006	.1674	-.0322	-.1696	-.1107								
150.000	-.1300	-.0588	.2049	.1844	-.1263	.0243	-.0362								
165.000	-.1136		.1824		.2905	.1506	-.2208								
180.000	-.0898	.0646	.1672	.2070											
320.000	.1742	.4685	.6290	.4666	-.2491	-.1876	-.2221								

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IA81A - PRESSURE SOURCE DATA TABULATION

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ARC11-019 1A8: LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB12)

ALPHA0 ( 6 ) = 4.224 BETA0 ( 3 ) = -.013

SECTION 1 ORBITER FUSELAGE

DEPENDENT VARIABLE CP

X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
0.000	1.4420	1.0580	.4310	.0851	.1366	.9010		-.2111		-.3170	-.0636	-.2187	.0909	.0094	.1105
20.000			.4678	.1218	.1332	.6012		-.3563		-.2599					
40.000			.6031	.2308	.1308	.3524		-.2077		-.4026	-.2147	-.1342	-.0039	-.0752	-.0831
55.000			.6393	.3583	.2564	.1829		.0091		-.1061					
70.000			.6290	.3712	.2561	.1374		.0610		.0125	-.2955	-.2695	-.1975	-.1228	
90.000		.7527	.6173	.3891	.2496	.1411		.1182		.0873	-.2741	-.3087	-.2988	-.0962	
120.000			.5622	.3873	.2518	.2106		.4509		.0281	-.2472	-.4158	-.3090	-.1330	
140.000										-.0651					
150.000			.4826	.3580	.2814	.2352			.5624	-.2620	-.4336	-.3303	-.2398	-.1698	
151.000															
156.000								.8342							
162.000									.6004						
165.000										-.2840	-.4125	-.2923	-.2435	-.1982	
169.000								.8932							
174.000						1.0079									
180.000	1.4420	.6164	.4247	.3672	.3004	.2440		.8598		-.4265	-.4175	-.2444	-.2444	-.2016	
305.000			.6016	.3302	.2854	.2228		-.0591		-.1286					
320.000			.5688	.2002	.1991	.3764		-.2463		-.3271	-.1125	-.2355	.0143	.0865	.0880
340.000			.5107	.0919	.1751	.6355		-.4357		-.2094					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
0.000	.2078	.3390	.4487	.3112	-.2008	-.2295	-.2152		-.1825	-.1813					
40.000	.1680	.2853	.3603	.0564	-.2801	-.2366	-.2635		-.1728	-.1834					
70.000	-.0886	-.2004	-.2253	-.0715	-.0626	-.1107	-.2186								
90.000	-.0445	-.1529	-.1725	.0233	-.1156	-.1366	-.1821								
105.000			-.0082	.0870	-.1724	-.2347	-.2143								
110.000								-.2863							
120.000	-.0942	-.0761	.1694	.1130	-.0666	-.2124	-.2567	-.2443							
135.000			.1914	.2130	-.0524	-.1227	-.1444								
150.000	-.0599	.0548	.1812	.2204	.0318	-.0234	-.1023								
165.000	-.0540		.1935		.1929	.0471	-.2202								
180.000	-.0540	.0474	.2019	.3012											
320.000	.1834	.3471	.4462	.1701	-.2314	-.2155	-.2548								

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## IABIA - PRESSURE SOURCE DATA TABULATION

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ARC11-019 IAB1 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB12)

ALPHA( 6) = 4.226 BETA( 4) = 4.116

SECTION ( 1) ORBITER FUSELAGE	DEPENDENT VARIABLE CP														
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.4209	1.0438	.4372	.0764	.0984	.9698		-.2426		-.2739	-.1944	-.1730	.1235	-.0162	.0469
20.000			.4035	.0684	.0941	.5384		-.3166		-.4013					
40.000			.4284	.1256	.1015	.2948		-.3110		-.3830	-.1034	-.1721	.0113	-.0341	.0556
55.000			.4359	.1865	.1339	.1457		-.0878		-.2087					
70.000			.4435	.2025	.1321	.0961		-.0047		-.0618	-.3689	-.3637	-.2470	-.1268	
90.000		.4992	.4639	.2430	.1392	.0827		.1066		-.0127	-.3497	-.3854	-.3499	-.1154	
120.000			.4595	.2986	.1816	.1442		.3700		-.0631	-.3256	-.4825	-.3252	-.1314	
140.000										-.2173					
150.000			.4256	.3274	.2415	.1909				-.3141	-.4324	-.3202	-.2767	-.2258	
151.000									.4584						
156.000								.7326							
162.000									.5243						
165.000										-.2869	-.4308	-.2603	-.2615	-.2308	
169.000								.8544							
174.000							.8681								
180.000	1.4209	.5520	.4130	.3524	.2814	.2281		.8488		-.3906	-.3993	-.2844	-.2489	-.2181	
305.000			.7838	.4911	.3815	.2564		.0547		-.0279					
320.000			.6803	.2792	.1981	.3887		-.1206		-.2211	-.0285	-.2794	-.0468	.1526	-.0952
340.000			.5570	.1070	.0946	.6673		-.4510		-.1733					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1686	.3151	.4455	.3130	-.1941	-.2277	-.2239		-.1729	-.1799					
40.000	.1618	.3595	.5594	.4186	-.3422	-.1774	-.2177		-.1836	-.1948					
70.000	-.0782	-.1854	-.2020	-.0365	-.0571	-.1268	-.2375								
90.000	-.0420	-.1270	-.0967	.0339	-.1256	-.1524	-.1976								
105.000			.0339	.0796	-.2142	-.2333	-.2335								
110.000								-.2827							
120.000	-.0479	-.0201	.1614	.1226	-.1132	-.2496	-.3310	-.2524							
135.000			.1861	.1695	-.0638	-.1586	-.2010								
150.000	-.0587	.0484	.1830	.1763	-.0027	-.1032	-.1772								
165.000	-.0738		.1787		.1180	-.0398	-.2440								
180.000	-.0933	.0549	.1704	.2084											
320.000	.1705	.2911	.3142	-.0892	-.2280	-.2351	-.3276								

ARC11-019 IAB1 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB12)

ALPHA0( 6) = 4.218 BETA0( 5) = 6.193

SECTION ( 1) ORBITER FUSELAGE				DEPENDENT VARIABLE CP											
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.3855	1.0182	.4228	.0894	.0891	.9677		-.2115		-.2501	-.2994	-.2771	.0745	-.0138	.0423
20.000			.3581	.0487	.1012	.5007		-.2827		-.4117					
40.000			.3254	.0736	.0999	.2502		-.3684		-.3615	-.0983	-.2068	-.0728	-.0915	.0463
55.000			.3260	.1070	.0768	.1282		-.1373		-.2378					
70.000			.3455	.1286	.0672	.0715		-.0364		-.1041	-.4024	-.3971	-.2805	-.1215	
90.000		.3768	.3826	.1733	.0734	.0618		.1081		-.0540	-.3810	-.4178	-.3552	-.1181	
120.000			.3974	.2498	.1257	.0989		.3265		-.0955	-.3544	-.5126	-.3524	-.1449	
140.000										-.2753					
150.000			.3754	.2964	.2040	.1410				-.3384	-.4395	-.2867	-.2971	-.2714	
151.000									.3975						
156.000								.7272							
162.000									.4730						
165.000										-.3170	-.4364	-.2644	-.2730	-.2516	
169.000								.8151							
174.000						.9032									
180.000	1.3855	.5114	.3838	.3264	.2520	.1947		.7975		-.3854	-.3810	-.3083	-.2570	-.2433	
305.000			.8819	.5955	.4370	.2883		.0976		.0230					
320.000			.7463	.3681	.2261	.4122		-.0694		-.1991	.0070	-.2638	-.0459	.0361	-.0630
340.000			.5784	.1576	.0742	.6979		-.4485		-.1428					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1475	.3032	.4396	.2803	-.2152	-.2420	-.2300		-.1671	-.1701					
40.000	.1123	.4010	.6103	.4995	-.3494	-.1745	-.2188		-.1911	-.1938					
70.000	-.0608	-.1676	-.1864	-.0535	-.0409	-.1337	-.2445								
90.000	-.0293	-.1130	-.1002	.0376	-.1193	-.1701	-.2105								
105.000			-.0175	.1033	-.2066	-.2368	-.2371								
110.000								-.2711							
120.000	-.0531	-.0110	.1027	.1193	-.1263	-.2559	-.3555	-.2553							
135.000			.1188	.1436	-.0239	-.1678	-.2330								
150.000	-.0781	.0665	.1169	.1319	.0153	-.1443	-.2098								
165.000	-.1022		.1123		.0317	-.0948	-.2494								
180.000	-.1478	.0434	.1154	.1936											
320.000	.1618	.2879	.3257	-.1233	-.2362	-.2402	-.3382								

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## 1A81A - PRESSURE SOURCE DATA TABULATION

PAGE 199

ARC11-019 1A81 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB12)

ALPHA( 7) = 6.323 BETA( 1) = -4.082

SECTION ( 1) ORBITER FUSELAGE				DEPENDENT VARIABLE CP											
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.4030	1.0432	.3890	.0296	.0389	.9078		-.1544		-.2847	-.0555	-.2531	.0005	.0934	.0862
20.000			.5048	.1417	.0142	.6574		-.3667		-.2046					
40.000			.7270	.3301	.1791	.4417		-.0790		-.2269	-.1940	-.1695	.0091	.0162	-.0043
55.000			.7956	.4994	.3486	.2253		.0988		-.0302					
70.000			.7672	.5034	.3372	.1480		.1449		.0552	-.2349	-.1676	-.1389	-.1040	
90.000		.9051	.7260	.4922	.3171	.1658		.1678		.1799	-.2042	-.2303	-.2303	-.1148	
120.000			.6030	.4089	.2471	.1929		.4932		.1310	-.1738	-.3740	-.3619	-.2322	
140.000										.0663					
150.000			.4557	.2940	.2275	.1904				-.1670	-.4620	-.4009	-.2869	-.2033	
151.000									.6405						
156.000								.8892							
162.000									.6547						
165.000										-.3290	-.4183	-.3388	-.2659	-.2172	
169.000							.9826	.9083							
174.000															
180.000	1.4030	.6014	.3412	.2875	.2209	.1801		.8158		-.4189	-.4375	-.3029	-.2727	-.2274	
305.000			.3648	.0911	.1081	.1358		-.1641		-.2528					
320.000			.3913	.0015	.0928	.2652		-.3689		-.1748	-.2141	-.1617	-.0292	.0424	.0918
340.000			.4126	-.0319	.0074	.5100		-.2767		-.1704					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.2074	.3751	.6144	.3324	-.3000	-.3302	-.2292		-.1892	-.1931					
40.000	.1391	.2262	.3584	-.0859	-.3151	-.2707	-.3112		-.1746	-.1876					
70.000	-.0976	-.1989	-.2613	-.1864	-.1246	-.1218	-.2230								
90.000	-.0611	-.1612	-.2325	-.0229	-.1178	-.1645	-.1884								
105.000			-.1484	.0368	-.1314	-.2154	-.2549								
110.000								-.3004							
120.000	-.2496	-.2449	.1327	.0794	-.0317	-.1949	-.2599	-.2549							
135.000			.1586	.1434	-.0490	-.1995	-.1407								
150.000	-.1322	.0108	.1555	.1585	-.1620	-.0043	-.0749								
165.000	-.0976		.1509		.2088	.1405	-.2066								
180.000	-.0720	.0705	.1419	.1900											
320.000	.2095	.4317	.6036	.4271	-.2179	-.1930	-.2249								

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ARC11-019 1A81 LVAP(ELHL SEALED) ORB. FUSELAGE

-(RETB12)

ALPHA0 ( 7 ) = 6.327 BETA0 ( 2 ) = -2.045

SECTION ( 1 ) ORBITER FUSELAGE				DEPENDENT VARIABLE CP											
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.4173	1.0414	.3169	-.0263	.0741	.8168		-.2531		-.1514	-.0571	-.2440	.0239	.1109	.1543
20.000			.4259	.0664	.0565	.6054		-.4551		-.2044					
40.000			.6339	.2501	.1417	.3026		-.1381		-.3051	-.2443	-.0634	.1131	.0069	-.0017
55.000			.7048	.4242	.3023	.1777		.0401		-.0804					
70.000			.6853	.4304	.2930	.1246		.0801		.0125	-.2676	-.2275	-.1428	-.1316	
90.000		.8113	.6579	.4292	.2720	.1374		.1123		.1365	-.2474	-.2797	-.2707	-.1285	
120.000			.5646	.3816	.2320	.1840		.4817		.0831	-.2176	-.4116	-.3639	-.1926	
140.000										.0074					
150.000			.4511	.3078	.2317	.1971				-.2220	-.4644	-.3899	-.2747	-.1798	
151.000									.6081						
156.000								.8650							
162.000									.6391						
165.000										-.3228	-.4457	-.3416	-.2682	-.1922	
169.000								.9167							
174.000						1.0116									
180.000	1.4173	.5929	.3629	.3091	.2423	.1946		.8588		-.4532	-.4432	-.2859	-.2769	-.1996	
305.000			.4354	.1862	.2089	.1390		-.1102		-.1943					
320.000			.4116	.0333	.1827	.2692		-.2983		-.2095	-.1683	-.1406	-.0216	.0949	.1460
340.000			.3850	-.0432	.1843	.5005		-.4160		-.0854					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.2268	.3615	.5281	.3237	-.2059	-.2359	-.2145			-.1726	-.1841				
40.000	.1791	.2766	.3646	-.0707	-.2622	-.2637	-.2932			-.1619	-.1820				
70.000	-.1048	-.2135	-.2587	-.1385	-.1233	-.1292	-.2279								
90.000	-.0720	-.1754	-.2156	-.0060	-.1348	-.1799	-.1950								
105.000			-.0946	.0680	-.1657	-.2433	-.2622								
110.000								-.3050							
120.000	-.1863	-.1481	.1525	.1018	-.0559	-.2121	-.2678	-.2675							
135.000			.1773	.1764	-.0615	-.1712	-.1514								
150.000	-.0825	.0191	.1686	.2138	-.0813	-.0204	-.1012								
165.000	-.0671		.1578		.1841	.0821	-.2223								
180.000	-.0584	.0401	.1649	.2460											
320.000	.1912	.3835	.5101	.2846	-.2569	-.1845	-.2099								

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## IAB1A - PRESSURE SOURCE DATA TABULATION

PAGE 201

ARC11-019 IAB1 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB12)

ALPHA0( 7) = 6.326 BETA0 ( 3) = .008

## SECTION ( 1) ORBITER FUSELAGE

## DEPENDENT VARIABLE CP

X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1860	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.4312	1.0496	.3843	.0370	.1349	.8478		-.2166		-.2292	-.0433	-.2174	.0675	.0498	.1337
20.000			.4239	.0726	.1263	.5681		-.4007		-.1946					
40.000			.5740	.2014	.1266	.3008		-.2041		-.3764	-.2690	-.0523	.0647	.0579	.0663
55.000			.6249	.3425	.2569	.1530		.0021		-.1306					
70.000			.6139	.3549	.2473	.1202		.0485		-.0298	-.2935	-.2808	-.1618	-.1319	
90.000		.7304	.5988	.3666	.2319	.1252		.0853		.0855	-.2771	-.3182	-.2764	-.1099	
120.000			.5337	.3540	.2175	.1782		.4392		.0385	-.2511	-.4260	-.3466	-.1513	
140.000										-.0572					
150.000			.4469	.3154	.2397	.2006				-.2734	-.4555	-.3583	-.2592	-.1617	
151.000									.5647						
156.000								.8427							
162.000									.6009						
165.000										-.3111	-.4366	-.3160	-.2641	-.1879	
169.000								.9027							
174.000							.9858								
180.000	1.4312	.5907	.3812	.3252	.2612	.2044		.8628		-.4527	-.4366	-.2672	-.2620	-.2021	
305.000			.5916	.3236	.2734	.2028		-.0573		-.1464					
320.000			.5566	.1831	.1832	.3522		-.2246		-.3232	-.1040	-.2153	.0341	.0960	.1572
340.000			.4779	.0577	.1733	.6054		-.4608		-.2071					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.2369	.3684	.4844	.3316	-.2229	-.2325	-.2200		-.1935	-.1968					
40.000	.1986	.3060	.3907	.0439	-.3149	-.2266	-.2383		-.1837	-.1837					
70.000	-.0931	-.2198	-.2536	-.0998	-.1044	-.1325	-.2306								
90.000	-.0539	-.1710	-.2002	-.0040	-.1485	-.1705	-.1965								
105.000			-.0206	.0631	-.1892	-.2584	-.2377								
110.000								-.2987							
120.000	-.1095	-.0948	.1574	.0824	-.0612	-.2213	-.2745	-.2625							
135.000			.1811	.1920	-.0417	-.1483	-.1601								
150.000	-.0551	.0381	.1672	.2222	-.0025	-.0450	-.1131								
165.000	-.0423		.1762		.1990	.0395	-.2260								
180.000	-.0446	.0304	.1817	.3602											
320.000	.2164	.3632	.4475	.1707	-.2053	-.2145	-.2479								

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IA81A - PRESSURE SOURCE DATA TABULATION

PAGE 202

ARC11-019 IA81 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB12)

ALPHA0 ( 7 ) = 6.323 BETA0 ( 4 ) = 2.079

SECTION ( 1 ) ORBITER FUSELAGE

DEPENDENT VARIABLE CP

X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.4114	1.0607	.4192	.0595	.1115	.8864		-.3161		-.2567	-.1156	-.2448	.0555	.0379	.1068
20.000			.4214	.0784	.1275	.5510		-.4158		-.2984					
40.000			.5026	.1702	.1245	.3139		-.2647		-.4439	-.1776	-.1323	.0354	.0338	.0746
55.000			.5294	.2636	.1993	.1368		-.0539		-.1787					
70.000			.5228	.2772	.1903	.0947		.0136		-.0728	-.3375	-.3317	-.1944	-.1343	
90.000		.6153	.5240	.2985	.1832	.0947		.0597		.0423	-.3171	-.3659	-.2932	-.1148	
120.000			.4838	.3158	.1874	.1515		.4119		-.0117	-.2957	-.4628	-.3418	-.1359	
140.000										-.1354					
150.000			.4224	.3059	.2258	.1774				-.3109	-.4588	-.3610	-.2709	-.1678	
151.000									.5147						
156.000								.8103							
162.000									.5481						
165.000										-.3103	-.4408	-.2901	-.2743	-.2052	
169.000								.8710							
174.000							.9708								
180.000	1.4114	.5568	.3793	.3214	.2530	.1909		.8490		-.4482	-.4306	-.2802	-.2665	-.2120	
305.000			.6972	.4005	.3195	.2196		-.0028		-.1041					
320.000			.6352	.2240	.1690	.3408		-.1774		-.2579	-.0638	-.2746	.0354	.0969	.1362
340.000			.5335	.0790	.1221	.6238		-.4634		-.1835					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.2113	.3384	.4491	.3204	-.1780	-.2129	-.2066		-.1714	-.1711					
40.000	.1730	.3031	.4432	.2190	-.3023	-.2157	-.2190		-.1678	-.1863					
70.000	-.0948	-.2107	-.2394	-.0749	-.0954	-.1399	-.2438								
90.000	-.0534	-.1563	-.1751	.0059	-.1588	-.1650	-.2054								
105.000			.0090	.0702	-.2148	-.2701	-.2422								
110.000								-.2993							
120.000	-.0679	-.0563	.1590	.0950	-.0920	-.2407	-.3042	-.2500							
135.000			.1815	.2493	-.0574	-.1527	-.1883								
150.000	-.0496	.0213	.1883	.2691	.0085	-.0916	-.1502								
165.000	-.0512		.1815		.1634	-.0265	-.2357								
180.000	-.0592	.0597	.1627	.2357											
320.000	.2048	.3353	.3860	.0323	-.2522	-.2435	-.2859								

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IA81A - PRESSURE SOURCE DATA TABULATION

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ARC11-019 IA81 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB12)

ALPHA0( 7) = 6.317 BETA0 ( 5) = 4.142

SECTION ( 1) ORBITER FUSELAGE

DEPENDENT VARIABLE CP

X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.3985	1.0492	.4145	.0256	.0560	.9264		-.2308		-.2832	-.1873	-.1175	.0227	-.0044	.0975
20.000			.3802	.0278	.0538	.5132		-.3474		-.3083					
40.000			.4070	.0968	.0780	.2676		-.3180		-.3920	-.1417	-.1581	.0376	-.0314	.0975
55.000			.4073	.1682	.1210	.1137		-.0986		-.2300					
70.000			.4155	.1843	.1151	.0729		-.0228		-.0952	-.3672	-.3548	-.2294	-.1412	
90.000		.4737	.4344	.2236	.1188	.0623		.0339		-.0150	-.3495	-.3977	-.3306	-.1260	
120.000			.4246	.2725	.1505	.1197		.3623		-.0587	-.3372	-.4868	-.3401	-.1285	
140.000										-.2142					
150.000			.3805	.2892	.2058	.1500			.4522	-.3304	-.4558	-.3461	-.2922	-.1948	
151.000															
156.000								.7154							
162.000									.5219						
165.000										-.3136	-.4493	-.2848	-.2832	-.2317	
169.000								.8558							
174.000							.7935								
180.000	1.3985	.5200	.3626	.3093	.2417	.1806		.8539		-.4215	-.4205	-.3096	-.2730	-.2264	
305.000			.7768	.4838	.3749	.2820		.0386		-.0537					
320.000			.6727	.2589	.1752	.3787		-.1159		-.2449	-.0491	-.2582	-.0589	.1731	-.0397
340.000			.5425	.0656	.0513	.6397		-.4635		-.2003					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1867	.3109	.4491	.3045	-.1916	-.2262	-.2212		-.1748	-.1845					
40.000	.2010	.3432	.5409	.3667	-.3356	-.1740	-.2131		-.1891	-.1979					
70.000	-.0778	-.2037	-.2283	-.0657	-.0884	-.1474	-.2559								
90.000	-.0393	-.1468	-.1578	.0075	-.1536	-.1755	-.2119								
105.000			-.0021	.0638	-.2398	-.2831	-.2478								
110.000								-.3070							
120.000	-.0396	-.0352	.1395	.1088	-.1174	-.2574	-.3324	-.2577							
135.000			.1865	.1925	-.0896	-.1772	-.2242								
150.000	-.0520	.0356	.1744	.1239	-.0497	-.1279	-.1849								
165.000	-.0706		.1494		.1200	-.0474	-.2521								
180.000	-.0848	.0721	.1463	.1901											
320.000	.1849	.2968	.3188	-.0841	-.2237	-.2392	-.3172								

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ARC11-019 IAB1 LVAP(ELHL SEALED) ORB. FUSELAGE

(RET813) ( 02 OCT 74 )

## REFERENCE DATA

## PARAMETRIC DATA

SREF = 2690.0000 SQ.FT. XMRP = 976.0000 IN. XT  
 LREF = 1297.0000 INCHES YMRP = .0000 IN. YT  
 BREF = 1297.0000 INCHES ZMRP = 400.0000 IN. ZT  
 SCALE = .0300 SCALE

MACH = .600 RN/FT = 2.250  
 ELV-18 = 8.000 ELV-08 = .000  
 RUDDER = .000 SPDBRK = .000

ALPHA( 1 ) = -6.055 BETAO ( 1 ) = -.005

## SECTION ( 1 ) ORBITER FUSELAGE

## DEPENDENT VARIABLE CP

X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.1037	.4081	.0513	.0149	-.0195	.4949		-.1886		-.1592	-.1217	-.0869	-.0386	-.0075	.0165
20.000			.0606	.0036	-.0344	-.0574		-.2114		-.1710					
40.000			.1590	.0011	-.0545	-.1532		-.2396		-.2133	-.1309	-.0787	-.0452	.0012	.0180
55.000			.2285	.0467	-.0380	-.1190		-.2083		-.2411					
70.000			.2739	.0677	-.0246	-.0842		-.2063		-.2875	-.2492	-.0925	-.0110	.0416	
90.000		.4661	.3254	.1072	-.0143	-.0607		-.2227		-.3303	-.2881	-.1227	-.0243	.0350	
120.000			.4062	.2318	.1270	.1091		-.0672		-.3787	-.3142	-.2629	-.0500	.0022	
140.000										-.3853					
150.000			.4392	.3267	.2514	.2447				-.5118	-.2712	-.1146	-.0388	.0068	
151.000									.0052						
156.000								.3952							
162.000									.0629						
165.000										-.9841	-.2144	-.1064	-.0372	.0114	
169.000								.5132							
174.000							.6939								
180.000	1.1037	.6518	.4310	.3389	.2942	.3041		.5030		-1.1424	-.2016	-.1003	-.0357	.0084	
305.000			.2115	.0593	.0053	-.1415		-.2150		-.2176					
320.000			.1139	.0037	-.0100	-.1610		-.2303		-.2023	-.1437	-.0814	-.0408	-.0074	.0140
340.000			.0954	-.0025	.0022	-.0500		-.2071		-.1696					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.0180	.0620	.1444	-.1584	-.1921	-.2113	-.1775		-.1596	-.1501					
40.000	-.0278	-.0054	.0007	-.2674	-.1926	-.1903	-.1678		-.1561	-.1626					
70.000	-.0598	-.1040	-.0569	.0130	-.1676	-.1719	-.1490								
90.000	-.0294	-.0504	.0048	.0298	-.2186	-.1908	-.1571								
105.000			.0562	.0431	-.3486	-.2584	-.2019								
110.000								-.2211							
120.000	.0028	.0211	.1194	.1593	-.4028	-.3295	-.30.3	-.2186							
135.000			.2166	.3933	-.2943	-.2176	-.2252								
150.000	.0298	.0899	.2442	.4708	-.2134	-.2070	-.2181								
165.000	.0349		.2447		-.0562	-.2034	-.1864								
180.000	.0385	.1036	.2488	.4841											
320.000	-.0310	.0379	.0692	-.2925	-.2241	-.1719	-.1670								

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## IABIA - PRESSURE SOURCE DATA TABULATION

PAGE 205

ARC11-019 IABI LVAP(ELHL SEALED) ORB. FUSELAGE

(RET813)

ALPHA0( 2) = -4.020 BETA0 ( 1) = -4.064

SECTION ( 1) ORBITER FUSELAGE				DEPENDENT VARIABLE CP											
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.0924	.4299	.0539	.0019	-.0344	.5837		-.2165		-.1722	-.1441	-.1008	-.0517	-.0032	.0420
20.000			.1010	.0257	-.0256	-.0122		-.2289		-.1763					
40.000			.2709	.0640	-.0033	-.0997		-.2279		-.1944	-.1261	-.0715	-.0352	.0241	.0533
55.000			.3843	.1762	.0795	-.0277		-.1325		-.1717					
70.000			.4403	.2131	.1018	.0264		-.1098		-.2047	-.2044	-.0720	-.0048	.0390	
90.000		.6537	.4708	.2473	.1277	.0650		-.0995		-.2264	-.2286	-.1006	-.0141	.0364	
120.000			.4957	.3254	.2214	.1993		.0759		-.2708	-.2677	-.2336	-.0352	-.0002	
140.000										-.3259					
150.000			.4527	.3120	.2538	.2621				-.4907	-.3357	-.1351	-.0486	-.0171	
151.000									.1172						
156.000								.4804							
162.000									.1430						
165.000										-1.0800	-.2589	-.1408	-.0620	-.0222	
169.000								.5232							
174.000							.7093								
180.000	1.0924	.6019	.3538	.2695	.2322	.2415		.4045		-1.2559	-.2425	-.1346	-.0676	-.0289	
305.000			.0580	-.0546	-.0925	-.2201		-.2599		-.2610					
320.000			.0407	-.0530	-.0642	-.2489		-.2434		-.2193	-.1647	-.1104	-.0651	-.0294	.0040
340.000			.0676	-.0344	-.0302	-.1512		-.2243		-.1915					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.0523	.1315	.3207	-.1759	-.2107	-.2313	-.2148		-.1645	-.1488					
40.000	-.0294	-.0171	.0130	-.4723	-.2066	-.2164	-.1932		-.1533	-.1589					
70.000	-.1034	-.1173	-.0441	.0608	-.1263	-.1345	-.1352								
90.000	-.0546	-.0623	.0253	.1061	-.1536	-.1494	-.1506								
105.000			.0917	.1627	-.2606	-.2081	-.1891								
110.000								-.2369							
120.000	-.0119	.0320	.1910	.3031	-.2658	-.2271	-.2158	-.1850							
135.000			.2615	.3618	-.2061	-.1567	-.1901								
150.000	-.0006	.0758	.2605	.3237	-.1618	-.1460	-.1845								
165.000	.0025		.2296		.0338	-.1280	-.1840								
180.000	-.0047	.0578	.2013	.3674											
320.000	.0230	.1169	.1941	-.2107	-.2905	-.1804	-.1927								

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## IAB1A - PRESSURE SOURCE DATA TABULATION

PAGE 206

ARC11-019 IAB1 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB13)

ALPHA0( 2) = -3.985 BETA0 ( 2) = .001

## SECTION ( 1) ORBITER FUSELAGE

## DEPENDENT VARIABLE CP

X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.1098	.4433	.0724	.0229	-.0121	.5013		-.1927		-.1530	-.1202	-.0776	-.0372	.0037	.0321
20.000			.0862	.0131	-.0295	-.0627		-.2082		-.1596					
40.000			.1801	.0137	-.0480	-.1558		-.2277		-.2047	-.1325	-.0715	-.0392	.0098	.0351
55.000			.2443	.0522	-.0259	-.1175		-.2051		-.2309					
70.000			.2761	.0692	-.0259	-.0790		-.2046		-.2816	-.2480	-.1047	-.0290	.0272	
90.000		.4567	.3187	.0980	-.0146	-.0555		-.2128		-.3283	-.2888	-.1323	-.0377	.0272	
120.000			.3818	.2097	.1070	.1063		-.0675		-.3911	-.3158	-.2612	-.0458	-.0034	
140.000										-.4126					
150.000			.4034	.2812	.2165	.2191				-.5578	-.2939	-.1333	-.0458	-.0036	
151.000									-.0100						
156.000								.3773							
162.000									.0352						
165.000										-1.0685	-.2368	-.1221	-.0432	-.0001	
169.000								.4888							
174.000							.6758								
180.000	1.1098	.6038	.3890	.2985	.2533	.2691		.4718		-1.2216	-.2184	-.1164	-.0448	-.0057	
305.000			.2232	.0726	.0129	-.1295		-.2092		-.2127					
320.000			.1387	.0218	-.0004	-.1601		-.2165		-.2015	-.1353	-.0791	-.0346	.0015	.0311
340.000			.1160	.0100	.0032	-.0422		-.2011		-.1667					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.0357	.0733	.1425	-.1536	-.1855	-.2065	-.1777		-.1568	-.1432					
40.000	-.0128	.0162	.0142	-.2572	-.1998	-.1861	-.1664		-.1583	-.1573					
70.000	-.1032	-.1284	-.0712	.0121	-.1768	-.1667	-.1532								
90.000	-.0561	-.0744	-.0108	.0310	-.2275	-.1892	-.1578								
105.000			.0485	.0346	-.3442	-.2576	-.2062								
110.000								-.2201							
120.000	-.0103	.0117	.1195	.1412	-.3833	-.3180	-.2766	-.1992							
135.000			.2131	.3593	-.2980	-.2205	-.2216								
150.000	.0188	.0756	.2371	.4453	-.2234	-.2200	-.2114								
165.000	.0223		.2366		-.0681	-.2154	-.1768								
180.000	.0249	.0894	.2376	.4617											
320.000	-.0046	.0510	.0774	-.2802	-.2106	-.1690	-.1600								

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## IA81A - PRESSURE SOURCE DATA TABULATION

PAGE 207

ARC11-019 IA81 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB13)

ALPHA0( 2) = -3.974 BETA0 ( 3) = 4.077

SECTION ( 1) ORBITER FUSELAGE		DEPENDENT VARIABLE CP													
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.0736	.3995	.0319	-.0185	-.0573	.5878		-.2198		-.1978	-.1762	-.1551	-.0805	-.0384	-.0032
20.000			.0091	-.0516	-.0965	-.1807		-.2511		-.2138					
40.000			.0397	-.0795	-.1348	-.2419		-.2548		-.2273	-.1525	-.1021	-.0697	-.0219	.0040
55.000			.0707	-.0846	-.1497	-.2054		-.2718		-.2889					
70.000			.0997	-.0872	-.1621	-.1802		-.2926		-.3542	-.2910	-.1283	-.0456	.0089	
90.000		.2188	.1458	-.0614	-.1570	-.1848		-.3278		-.4153	-.3373	-.1550	-.0481	.0094	
120.000			.2302	.0626	-.0372	-.0356		-.2392		-.5134	-.3832	-.3169	-.0970	-.0415	
140.000										-.5088					
150.000			.3027	.2042	.1331	.1295				-.6442	-.2946	-.1596	-.0815	-.0376	
151.000									-.1833						
156.000								.2378							
162.000									-.1134						
165.000										-1.0767	-.2508	-.1422	-.0702	-.0304	
169.000								.4087							
174.000							.6115								
180.000	1.0736	.5522	.3658	.2765	.2298	.2401		.4336		-1.2189	-.2411	-.1334	-.0687	-.0310	
305.000			.3658	.1783	.1115	-.0500		-.1367		-.1541					
320.000			.1825	.0394	.0184	-.1231		-.2252		-.2019	-.1566	-.0867	-.0353	.0102	.0508
340.000			.1045	-.0061	-.0120	-.0037		-.2351		-.2076					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.0076	.0832	.2106	-.1259	-.2452	-.2483	-.2469		-.1726	-.1544					
40.000	.0050	.0734	.1622	-.1769	-.2272	-.1988	-.2110		-.2035	-.1994					
70.000	-.1014	-.1553	-.1193	-.0462	-.2359	-.2194	-.1869								
90.000	-.0710	-.1039	-.0642	-.0421	-.2900	-.2442	-.1920								
105.000			-.0184	-.0611	-.4315	-.3137	-.2377								
110.000								-.2362							
120.000	-.0464	-.0529	.0099	-.0341	-.5479	-.4296	-.3644	-.2315							
135.000			.1221	.2341	-.4362	-.3157	-.2864								
150.000	-.0171	.0269	.1628	.4272	-.3626	-.3306	-.2736								
165.000	-.0119		.1797		-.2055	-.3116	-.1930								
180.000	-.0053	.0629	.2075	.4277											
320.000	-.0253	.0181	.0156	-.5448	-.2555	-.2382	-.2413								

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IABIA - PRESSURE SOURCE DATA TABULATION

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ARC11-019 IAB1 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB13)

ALPHA0( 3) = .096 BETA0 ( 1) = -6.101

SECTION ( 1) ORBITER FUSELAGE		DEPENDENT VARIABLE CP													
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.0568	.4747	.0729	-.0026	-.0398	.6123		-.2187		-.1787	-.1643	-.1102	-.0651	.0189	.0720
20.000			.1476	.0465	-.0105	.0171		-.2332		-.1797					
40.000			.3568	.1310	.0540	-.0496		-.1847		-.1593	-.0936	-.0397	-.0083	.0624	.1105
55.000			.4862	.2740	.1677	.0504		-.0600		-.1111					
70.000			.5167	.2923	.1709	.0867		-.0501		-.1562	-.2434	-.0617	-.0187	.0079	
90.000		.7129	.5188	.3110	.1824	.1196		-.0328		-.1572	-.2126	-.1016	-.0296	-.0005	
120.000			.4704	.3022	.2040	.1970		.1138		-.2506	-.2930	-.2757	-.1157	-.0900	
140.000										-.3489					
150.000			.3595	.2150	.1128	.1950				-.5621	-.4517	-.1975	-.1083	-.0777	
151.000									.1137						
156.000								.4686							
162.000									.0944						
165.000										-1.2573	-.3280	-.1934	-.1125	-.0787	
169.000								.4697							
174.000							.6589								
180.000	1.0568	.4762	.2238	.1546	.1244	.1437		.2829		-1.4464	-.2982	-.1809	-.1151	-.0793	
305.000			-.0175	-.1147	-.1407	-.2496		-.2734		-.2766					
320.000			.0146	-.0875	-.0980	-.2920		-.2604		-.2439	-.2006	-.1423	-.0806	-.0294	.0283
340.000			.0731	-.0471	-.0428	-.1963		-.2437		-.1919					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.0839	.1584	.3247	-.2285	-.3306	-.2333	-.1956		-.1773	-.1522					
40.000	.0107	.0070	.0265	-.4289	-.3446	-.2239	-.2185		-.1732	-.1660					
70.000	-.1884	-.1621	-.0540	.0871	-.0903	-.0996	-.1074								
90.000	-.1318	-.1068	.0125	.1518	-.1111	-.1152	-.1344								
105.000			.0722	.2588	-.1891	-.1675	-.1619								
110.000								-.2153							
120.000	-.1245	-.0317	.1684	.3888	-.2255	-.1775	-.1704	-.1647							
135.000			.2275	.3284	-.2103	-.1494	-.1829								
150.000	-.0697	.0125	.2181	.1953	-.2014	-.1344	-.1777								
165.000	-.0629		.1821		.0524	-.0954	-.1767								
180.000	-.0593	.0026	.1414	.2171											
320.000	.0963	.1725	.2416	-.0783	-.2657	-.1749	-.1438								

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## IA81A - PRESSURE SOURCE DATA TABULATION

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ARC11-019 IA81 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB13)

ALPHA0 ( 3 ) = .098 BETA0 ( 2 ) = -4.070

SECTION ( 1 ) ORBITER FUSELAGE				DEPENDENT VARIABLE CP											
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.0847	.4937	.0960	.0164	-.0185	.5940		-.1865		-.1552	-.1237	-.0835	-.0420	.0242	.0799
20.000			.1505	.0475	-.0042	-.0003		-.2103		-.1600					
40.000			.3192	.1045	.0312	-.0680		-.1907		-.1621	-.1032	-.0431	-.0132	.0552	.0977
55.000			.4149	.2031	.1110	-.0034		-.1063		-.1478					
70.000			.4403	.2189	.1058	.0360		-.1000		-.1954	-.2432	-.0783	-.0321	.0015	
90.000		.6293	.4530	.2374	.1190	.0686		-.0873		-.1986	-.2390	-.1203	-.0415	-.0042	
120.000			.4371	.2680	.1082	.1744		.0594		-.2957	-.3026	-.2673	-.0911	-.0553	
140.000										-.3827					
150.000			.3657	.2163	.1703	.1938				-.5809	-.4056	-.1786	-.0842	-.0530	
151.000									.0664						
156.000								.4393							
162.000									.0653						
165.000										-1.2292	-.2979	-.1707	-.0869	-.0509	
169.000								.4689							
174.000							.6736								
180.000	1.0847	.4974	.2584	.1840	.1446	.1738		.3438		-1.3852	-.2727	-.1576	-.0869	-.0509	
305.000			.0717	-.0491	-.0890	-.2028		-.2477		-.2595					
320.000			.0749	-.0343	-.0480	-.2296		-.2298		-.2123	-.1565	-.1077	-.0511	-.0074	.0349
340.000			.1013	-.0137	-.0202	-.1360		-.2065		-.1688					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.0935	.1671	.3227	-.1662	-.3054	-.2130	-.1967		-.1716	-.1566					
40.000	.0198	.0334	.0310	-.4491	-.3106	-.1983	-.1904		-.1690	-.1628					
70.000	-.1901	-.1742	-.0803	.0657	-.1144	-.1141	-.1166								
90.000	-.1328	-.1108	-.0016	.1110	-.1432	-.1415	-.1391								
105.000			.0640	.1856	-.2340	-.1930	-.1731								
110.000								-.2255							
120.000	-.0888	-.0163	.1737	.2907	-.2677	-.2129	-.1908	-.1730							
135.000			.2330	.2855	-.2377	-.1705	-.1919								
150.000	-.0405	.0378	.2314	.2440	-.2088	-.1611	-.1835								
165.000	-.0306		.2025		.0047	-.1407	-.1720								
180.000	-.0279	.0357	.1804	.3038											
320.000	.0827	.1595	.2261	-.1149	-.2256	-.1710	-.1463								



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## 1A81A - PRESSURE SOURCE DATA TABULATION

PAGE 210

ARC11-019 1A81 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB13)

ALPHA0 ( 3 ) = .086 BETA0 ( 3 ) = -.016

SECTION ( 1 ) ORBITER FUSELAGE		DEPENDENT VARIABLE CP													
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.0987	.5032	.0988	.0327	-.0098	.4971		-.1694		-.1480	-.1068	-.0734	-.0248	.0244	.0571
20.000			.1156	.0322	-.0229	-.0569		-.1959		-.1527					
40.000			.2067	.0375	-.0308	-.1349		-.2064		-.1864	-.1173	-.0666	-.0274	.0255	.0649
55.000			.2557	.0700	-.0145	-.1030		-.1848		-.2238					
70.000			.2704	.0705	-.0287	-.0768		-.1917		-.2758	-.2721	-.1267	-.0557	-.0175	
90.000		.4258	.2957	.0936	-.0219	-.0517		-.1953		-.3142	-.2951	-.1488	-.0599	-.0222	
120.000			.3294	.1672	.0676	.0786		-.0649		-.4054	-.3411	-.2682	-.0729	-.0342	
140.000										-.4661					
150.000			.3162	.2029	.1398	.1539				-.6372	-.3495	-.1640	-.0719	-.0307	
151.000									-.0617						
156.000								.3402							
162.000									-.0391						
165.000										-1.1953	-.2805	-.1483	-.0714	-.0276	
169.000								.4339							
174.000							.6315								
180.000	1.0987	.4984	.2894	.2071	.1722	.1963		.4081		-1.3550	-.2580	-.1436	-.0677	-.0349	
305.000			.2304	.0784	.0236	-.1181		-.1906		-.2093					
320.000			.1703	.0396	.0137	-.1464		-.2038		-.1837	-.1330	-.0708	-.0237	.0216	.0608
340.000			.1467	.0233	.0100	-.0470		-.1896		-.1529					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.0686	.0942	.1502	-.1553	-.2062	-.2026	-.1908		-.1604	-.1594					
40.000	.0346	.0451	.0330	-.2343	-.2026	-.1869	-.1647		-.1552	-.1650					
70.000	-.1907	-.1949	-.1113	-.0062	-.1769	-.1706	-.1449								
90.000	-.1379	-.1300	-.0329	.0200	-.2288	-.1984	-.1632								
105.000			.0383	.0289	-.3293	-.2544	-.2070								
110.000								-.2310							
120.000	-.0610	-.0198	.1215	.0823	-.3680	-.2952	-.2550	-.1893							
135.000			.1832	.2671	-.3172	-.2263	-.2247								
150.000	-.0213	.0435	.1989	.3597	-.2638	-.2347	-.2117								
165.000	-.0124		.1968		-.1094	-.2326	-.1762								
180.000	-.0119	.0545	.1989	.4048											
320.000	.0367	.0775	.0901	-.2596	-.2366	-.1846	-.1726								

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## IAB1A - PRESSURE SOURCE DATA TABULATION

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ARC11-019 IAB1 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB13)

ALPHA0( 3) = .117 BETA0 ( 4) = 4.075

SECTION ( 1) ORBITER FUSELAGE

DEPENDENT VARIABLE CP

X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.0701	.4691	.0743	.0045	-.0407	.5955		-.2043		-.1785	-.1594	-.1373	-.0700	-.0113	.0276
20.000			.0471	-.0330	-.0828	-.1689		-.2328		-.2010					
40.000			.0701	-.0575	-.1103	-.2250		-.2338		-.2088	-.1500	-.0979	-.0544	.0022	.0365
55.000			.0910	-.0720	-.1327	-.1959		-.2495		-.2736					
70.000			.1003	-.0840	-.1545	-.1655		-.2726		-.3436	-.2944	-.1451	-.0648	-.0170	
90.000		.1947	.1327	-.0575	-.1529	-.1587		-.2993		-.3916	-.3312	-.1641	-.0602	-.0222	
120.000			.1974	.0404	-.0567	-.0354		-.2181		-.5158	-.3820	-.2945	-.0730	-.0367	
140.000										-.5490					
150.000			.2359	.1362	.0746	.0895				-.6964	-.3239	-.1661	-.0813	-.0481	
151.000									-.2171						
155.000								.2122							
162.000									-.1675						
165.000										-1.2116	-.2772	-.1635	-.0834	-.0471	
169.000								.3666							
174.000							.5787								
180.000	1.0701	.4481	.2714	.1956	.1520	.1755		.3766		-1.3745	-.2757	-.1604	-.0818	-.0517	
305.000			.3966	.2112	.1333	-.0172		-.1092		-.1402					
320.000			.2377	.0839	.0492	-.0903		-.1879		-.1786	-.1264	-.0700	-.0103	.0328	.0837
340.000			.1513	.0273	.0014	.0097		-.2109		-.1869					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.0468	.1145	.2285	-.1039	-.2467	-.2539	-.2460		-.1596	-.1408					
40.000	.0614	.1156	.1869	-.1464	-.2316	-.1829	-.1968		-.1872	-.1877					
70.000	-.1845	-.2126	-.1566	-.0572	-.2342	-.2130	-.1797								
90.000	-.1282	-.1510	-.0849	-.0463	-.2872	-.2425	-.1911								
105.000			-.0251	-.0650	-.4202	-.3141	-.2423								
110.000								-.2449							
120.000	-.0697	-.0651	.0196	-.0930	-.5085	-.3966	-.3276	-.2129							
135.000			.1243	.2053	-.4395	-.3127	-.2754								
150.000	-.0345	.0149	.1523	.3233	-.3778	-.3329	-.2620								
165.000	-.0335		.1689		-.2332	-.3246	-.1840								
180.000	-.0309	.0393	.1855	.3565											
320.000	.0234	.0503	.0444	-.4971	-.2410	-.2299	-.2408								

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## IABIA - PRESSURE SOURCE DATA TABULATION

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ARC11-019 IAB1 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB13)

ALPHA0 ( 3 ) = .121 BETA0 ( 5 ) = 6.104

SECTION ( 1 ) ORBITER FUSELAGE		DEPENDENT VARIABLE CP													
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.0324	.4467	.0437	-.0273	-.0843	.4989		-.2414		-.2345	-.2150	-.1765	-.1004	-.0498	-.0150
20.000			-.0015	-.0859	-.1309	-.2357		-.2675		-.2502					
40.000			-.0015	-.1215	-.1728	-.2810		-.2602		-.2371	-.1801	-.1286	-.0769	-.0117	.0256
55.000			.0006	-.1429	-.1984	-.2414		-.2822		-.2948					
70.000			.0127	-.1487	-.2209	-.2144		-.3064		-.3746	-.3088	-.1531	-.0686	-.0227	
90.000		.0704	.0510	-.1309	-.2199	-.2138		-.3489		-.4323	-.3531	-.1697	-.0623	-.0227	
120.000			.1135	-.0357	-.1247	-.0961		-.2922		-.5629	-.4057	-.3084	-.0873	-.0440	
140.000										-.5942					
150.000			.1654	.0810	.0144	.0326				-.7395	-.3281	-.1843	-.1051	-.0701	
151.000									-.3095						
156.000								.1245							
162.000									-.2549						
165.000										-1.2194	-.2916	-.1822	-.1066	-.0727	
169.000								.3145							
174.000							.4963								
180.000	1.0324	.3942	.2342	.1517	.1170	.1493		.3181		-1.4229	-.2989	-.1843	-.1092	-.0805	
305.000			.4724	.2700	.1920	.0357		-.0644		-.0994					
320.000			.2715	.0926	.0586	-.0768		-.1846		-.1729	-.1296	-.0686	-.0122	.0375	.0947
340.000			.1396	.0046	-.0122	.0076		-.2481		-.2176					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.0183	.0937	.2096	-.1121	-.2575	-.2585	-.2432		-.1680	-.1424					
40.000	.0692	.1311	.2122	-.1074	-.2460	-.1928	-.2131		-.2034	-.1890					
70.000	-.1777	-.2162	-.1684	-.0814	-.2538	-.2267	-.1866								
90.000	-.1283	-.1543	-.1012	-.0689	-.3096	-.2700	-.2084								
105.000			-.0476	-.0918	-.4378	-.3283	-.2416								
110.000								-.2318							
120.000	-.0800	-.0877	-.0122	-.1428	-.5749	-.4463	-.3533	-.2151							
135.000			.0727	.1048	-.5123	-.3626	-.3019								
150.000	-.0602	-.0221	.1029	.3383	-.4738	-.3980	-.2905								
165.000	-.0576		.1201		-.3299	-.3772	-.1939								
180.000	-.0623	.0024	.1544	.2924											
320.000	.0131	.0487	.0383	-.5472	-.2392	-.2338	-.2557								

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## IABIA - PRESSURE SOURCE DATA TABULATION

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ARC11-019 IAB1 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB13)

ALPHA( 4) = 4.241 BETA( 1) = -4.062

SECTION ( 1) ORBITER FUSELAGE		DEPENDENT VARIABLE CP													
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.0723	.5606	.1365	.0484	.0022	.5960		-.1714		-.1364	-.1048	-.0688	-.0170	.0513	.1120
20.000			.1985	.0790	.0235	.0225		-.1897		-.1405					
40.000			.3635	.1450	.0646	-.0440		-.1600		-.1369	-.0820	-.0227	.0114	.0808	.1352
55.000			.4416	.2316	.1276	.0148		-.0856		-.1379					
70.000			.4390	.2233	.1042	.0381		-.0913		-.1958	-.2887	-.1055	-.0573	-.0310	
90.000		.5928	.4291	.2223	.1011	.0603		-.0840		-.2167	-.2571	-.1369	-.0687	-.0409	
120.000			.3723	.2015	.1093	.1219		.0425		-.3294	-.3430	-.3240	-.1584	-.1325	
140.000										-.4471					
150.000			.2682	.1330	.0943	.1255				-.6616	-.4677	-.2067	-.1092	-.0808	
151.000									.0175						
156.000								.4047							
162.000									.0003						
165.000										-1.3813	-.3389	-.1891	-.0989	-.0710	
169.000								.4256							
174.000							.6350								
180.000	1.0723	.3934	.1651	.1021	.0762	.1100		.2923		-1.5468	-.2970	-.1715	-.0968	-.0643	
305.000			.0829	-.0378	-.0776	-.1890		-.2360		-.2530					
320.000			.1154	-.0092	-.0301	-.2159		-.2110		-.1931	-.1510	-.0945	-.0362	.0197	.0775
340.000			.1486	.0111	.0019	-.1171		-.1870		-.1471					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1321	.1902	.3436	-.1430	-.2167	-.2021	-.1872		-.1336	-.1326					
40.000	.0687	.0683	.0742	-.4528	-.1903	-.2146	-.1867		-.1473	-.1508					
70.000	-.2778	-.2272	-.1101	.0521	-.1133	-.1088	-.1083								
90.000	-.2055	-.1652	-.0353	.1110	-.1376	-.1373	-.1460								
105.000			.0334	.2005	-.2208	-.1881	-.1717								
110.000								-.2346							
120.000	-.1699	-.0668	.1542	.2529	-.2768	-.2088	-.1855	-.1726							
135.000			.2150	.2177	-.2705	-.1877	-.2005								
150.000	-.0738	.0117	.2078	.1536	-.2529	-.1795	-.1840								
165.000	-.0829		.1871		-.0301	-.1516	-.1747								
180.000	-.0516	.0220	.1565	.2633											
320.000	.1220	.1841	.2341	-.1526	-.2877	-.1774	-.1628								

ARC11-019 1A81 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB13)

ALPHA0( 4) = 4.240 BETA0 ( 2) = -.004

SECTION ( 1) ORBITER FUSELAGE				DEPENDENT VARIABLE CP											
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.0892	.5728	.1454	.0609	.0106	.5140		-.1462		-.1223	-.0880	-.0531	-.0058	.0510	.0885
20.000			.1667	.0346	-.0045	-.0376		-.1676		-.1347					
40.000			.2478	.0666	-.0045	-.1134		-.1779		-.1534	-.1066	-.0459	-.0053	.0562	.1034
55.000			.2748	.0847	.0007	-.0933		-.1634		-.2026					
70.000			.2696	.0681	-.0300	-.0687		-.1769		-.2690	-.3130	-.1373	-.0755	-.0436	
90.000		.3971	.2732	.0801	-.0253	-.0408		-.1841		-.3006	-.2985	-.1612	-.0791	-.0452	
120.000			.2753	.1190	.0326	.0575		-.0584		-.4200	-.3626	-.2934	-.1005	-.0669	
140.000										-.5195					
150.000			.2379	.1190	.0723	.1040				-.7040	-.3925	-.1798	-.0819	-.0469	
151.000									-.1005						
156.000								.3185							
162.000									-.0933						
165.000										-1.3350	-.3104	-.1633	-.0778	-.0449	
169.000								.3962							
174.000							.6014								
180.000	1.0892	.3934	.1937	.1249	.0971	.1366		.3559		-1.5090	-.2866	-.1576	-.0773	-.0449	
305.000			.2618	.1010	.0424	-.0945		-.1665		-.1963					
320.000			.2263	.0771	.0434	-.1126		-.1721		-.1587	-.1042	-.0549	-.0028	.0509	.0972
340.000			.1905	.0496	.0331	-.0154		-.1586		-.1262					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1050	.1201	.1515	-.1413	-.2035	-.1936	-.1740		-.1553	-.1538					
40.000	.0813	.0866	.0664	-.2136	-.2139	-.1740	-.1570		-.1461	-.1558					
70.000	-.2699	-.2395	-.1425	-.0064	-.1648	-.1564	-.1313								
90.000	-.1936	-.1694	-.0476	.0257	-.2118	-.1833	-.1554								
105.000			.0365	.0314	-.3011	-.2319	-.1961								
110.000								-.2264							
120.000	-.1064	-.0414	.1190	.0236	-.3442	-.2717	-.2223	-.1640							
135.000			.1776	.1965	-.3250	-.2352	-.2172								
150.000	-.0445	.0210	.1807	.2827	-.2826	-.2383	-.2001								
165.000	-.0380		.1709		-.1331	-.2383	-.1640								
180.000	-.0342	.0339	.1678	.3756											
320.000	.0825	.1113	.1094	-.2299	-.2262	-.1781	-.1682								

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ARC11-019 1A81 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB13)

ALPHA0( 4) = 4.238 BETA0( 3) = 4.073

SECTION ( 1) ORBITER FUSELAGE				DEPENDENT VARIABLE CP											
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.0550	.5298	.1054	.0217	-.0333	.5953		-.1864		-.1712	-.1525	-.1292	-.0548	.0032	.0495
20.000			.0805	-.0172	-.0718	-.1585		-.2169		-.1889					
40.000			.0940	-.0406	-.1014	-.2195		-.2242		-.2081	-.1519	-.0961	-.0450	.0146	.0727
55.000			.0919	-.0661	-.1388	-.1921		-.2418		-.2725					
70.000			.0930	-.0827	-.1627	-.1693		-.2590		-.3395	-.3179	-.1628	-.0889	-.0512	
90.000		.1626	.1132	-.0707	-.1575	-.1544		-.2803		-.3857	-.3438	-.1821	-.0838	-.0486	
120.000			.1502	.0041	-.0795	-.0484		-.1956		-.5237	-.3913	-.2892	-.0838	-.0481	
140.000										-.5977					
150.000			.1574	.0680	.0104	.0430				-.7664	-.3593	-.1826	-.0931	-.0544	
151.000									-.2522						
156.000								.1903							
162.000									-.2226						
167.000										-1.3296	-.3050	-.1785	-.0946	-.0600	
169.000								.3243							
174.000							.5266								
180.000	1.0550	.3446	.1793	.1038	.0745	.1050		.3232		-1.5525	-.3065	-.1785	-.0993	-.0673	
305.000			.4247	.2337	.1623	.0089		-.0829		-.1240					
320.000			.2935	.1179	.0802	-.0655		-.1593		-.1416	-.1178	-.0424	.0099	.0598	.1249
340.000			.1916	.0462	.0192	.0208		-.1987		-.1716					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.0789	.1367	.2402	-.0896	-.2489	-.2541	-.2268		-.1492	-.1141					
40.000	.1037	.1460	.2056	-.1402	-.2324	-.1864	-.1866		-.1690	-.1675					
70.000	-.2640	-.2635	-.1738	-.0658	-.2252	-.2091	-.1737								
90.000	-.1886	-.1866	-.0989	-.0601	-.2799	-.2319	-.1855								
105.000			-.0358	-.0441	-.3946	-.2923	-.2345								
110.000								-.2495							
120.000	-.0967	-.0782	.0154	.0053	-.4757	-.3630	-.2985	-.1907							
135.000			.1068	.2192	-.4432	-.3093	-.2691								
150.000	-.0569	-.0038	.1358	.2238	-.3982	-.3243	-.2547								
165.000	-.0544		.1472		-.2551	-.3166	-.1768								
180.000	-.0580	.0231	.1606	.2770											
320.000	.0593	.0805	.0676	-.5031	-.2376	-.2345	-.2340								

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## 1A81A - PRESSURE SOURCE DATA TABULATION

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ARC11-019 1A81 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB13)

ALPHA0( 5) = 8.385 BETA0 ( 1) = -.010

SECTION ( 1) ORBITER FUSELAGE

DEPENDENT VARIABLE CP

X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.0717	.6396	.1944	.0909	.0309	.5307		-.1185		-.0970	-.0615	-.0276	.0256	.0765	.1248
20.000			.2132	.0852	.0174	-.0272		-.1454		-.1116					
40.000			.2878	.1096	.0221	-.0932		-.1449		-.1330	-.0749	-.0240	.0200	.0796	.1428
55.000			.2945	.1106	.0142	-.0741		-.1485		-.1960					
70.000			.2679	.0832	-.0326	-.0631		-.1594		-.2685	-.3550	-.1535	-.0966	-.0737	
90.000		.3603	.2554	.0712	-.0389	-.0434		-.1682		-.2976	-.3125	-.1755	-.0971	-.0784	
120.000			.2142	.0650	-.0117	.0208		-.0613		-.4360	-.3938	.0000	-.1519	-.1286	
140.000										-.5592					
150.000			.1527	.0484	.0120	.0488				-.7720	-.4321	-.1925	-.0924	-.0616	
151.000									-.1408						
156.000								.2951							
162.000									-.1486						
165.000										-1.4457	-.3301	-.1657	-.0867	.0000	
169.000							.3527								
174.000						.5645									
180.000	1.0717	.2865	.1026	.0465	.0295	.0752		.3029		-1.6401	-.3006	-.1564	-.0799	-.0564	
305.000			.2825	.1189	.0610	-.0843		-.1470		-.1781					
320.000			.2756	.1054	.0723	-.0993		-.1429		-.1188	-.0841	-.0218	.0226	.0805	.1351
340.000			.2424	.0768	.0579	-.0066		-.1413		-.1023					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1376	.1485	.1824	-.1416	-.1903	-.1918	-.1493		-.1380	-.1319					
40.000	.1196	.1191	.1040	-.2105	-.2084	-.1761	-.1544		-.1360	-.1456					
70.000	-.3426	-.2904	-.1575	-.0033	-.1593	-.1476	-.1272								
90.000	-.2640	-.2097	-.0651	.0325	-.1991	-.1802	-.1498								
105.000			.0287	.0573	-.2760	-.2217	-.1863								
110.000								-.2222							
120.000	-.1606	-.0631	.0989	.0589	-.3279	-.2521	-.2038	-.1634							
135.000			.1122	.1693	-.3290	-.2290	-.2155								
150.000	-.0836	-.0032	.1418	.3329	-.3170	-.2459	-.2031								
165.000	-.0660		.1376		-.1564	-.2464	-.1572								
180.000	-.0603	.0060	.1464	.3969											
320.000	.1206	.1489	.1402	-.1939	-.2264	-.1606	-.1546								

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ARC11-019 IAB1 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB13)

ALPHA0( 6) = 10.456 BETA0 ( 1) = .002

## SECTION ( 1) ORBITER FUSELAGE

## DEPENDENT VARIABLE CP

X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.0574	.6648	.2157	.0940	.0398	.5291		-.1130		-.0804	-.0641	-.0218	.0255	.0830	.1223
20.000			.2388	.0950	.0285	-.0369		-.1438		-.1015					
40.000			.3149	.1195	.0347	-.0969		-.1417		-.1209	-.0801	-.0157	.0177	.0891	.1409
55.000			.3036	.1086	.0162	-.0902		-.1526		-.1902					
70.000			.2666	.0701	-.0336	-.0548		-.1656		-.2635	-.3454	-.1619	-.1232	-.0874	
90.000		.3357	.2388	.0518	-.0501	-.0435		-.1770		-.3019	-.3167	-.1905	-.1258	-.0874	
120.000			.1864	.0258	-.0431	-.0001		-.0768		-.4580	-.4057	-.3651	-.1784	-.1636	
140.000										-.5977					
150.000			.1129	-.0070	-.0297	.0259				-.8222	-.4491	-.2107	-.0961	-.0792	
151.000									-.1481						
156.000								.2737							
162.000									-.1676						
165.000										-1.5295	-.3300	-.1823	-.0817	-.0678	
169.000								.3257							
174.000							.5486								
180.000	1.0574	.2180	.0635	.0162	-.0152	.0525		.2711		-1.7308	-.3086	-.1714	-.0797	-.0668	
305.000			.2897	.1339	.0635	-.0737		-.1510		-.1847					
320.000			.2891	.1287	.0780	-.0900		-.1220		-.1184	-.0704	-.0217	.0385	.0768	.1347
340.000			.2553	.0943	.0568	.0019		-.1266		-.1065					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1342	.1575	.1775	-.1490	-.2275	-.1888	-.1742		-.1467	-.1330					
40.000	.1140	.1305	.1077	-.2123	-.2321	-.1791	-.1660		-.1452	-.1559					
70.000	-.3974	-.3189	-.1809	-.0009	-.1762	-.1469	-.1412								
90.000	-.2827	-.2337	-.0940	.0333	-.2135	-.1914	-.1686								
105.000			.0027	.0752	-.2896	-.2261	-.2021								
110.000								-.2301							
120.000	-.1832	-.0847	.0684	.1096	-.3136	-.2590	-.1960	-.1755							
135.000			.0916	.2484	-.3325	-.2450	-.2123								
150.000	-.0934	-.0382	.1217	.4203	-.3228	-.2615	-.2026								
165.000	-.0761		.1339		-.1709	-.2677	-.1536								
180.000	-.0654	-.0051	.1426	.4017											
320.000	.1315	.1511	.1518	-.2140	-.2307	-.1933	-.1567								

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## 1A81A - PRESSURE SOURCE DATA TABULATION

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ARC11-019 1A81 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB14)

ALPHA0 ( 1 ) = -6.295 BETA0 ( 2 ) = -2.013

## SECTION ( 1 ) ORBITER FUSELAGE

## DEPENDENT VARIABLE CP

X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.4208	.9762	.4319	.2195	.3692	.9962		-.1558		-.3767	-.0160	.0688	-.0771	-.2114	-.1955
20.000			.4844	.2628	.3615	.7211		-.2874		-.2000					
40.000			.5411	.3428	.3456	.5049		-.1235		-.3219	-.0932	.0458	-.0079	-.1723	-.0864
55.000			.7207	.4714	.3909	.3674		-.1523		-.0131					
70.000			.7362	.5049	.3828	.3527		.2350		.0805	-.2756	-.1710	-.0749	-.0283	
90.000		.9118	.7574	.5396	.3977	.3797		.2975		.1098	-.2333	-.2595	-.1240	-.0280	
120.000			.7665	.6012	.4651	.5144		.5379		.1123	-.1476	-.3756	-.1922	-.0395	
140.000										.0622					
150.000			.7353	.6031	.5115	.5868				-.1318	-.3176	-.1832	-.1202	-.0681	
151.000									.6780						
156.000								.9419							
162.000									.7343						
165.000										-.1741	-.2603	-.1627	-.1214	-.0895	
169.000								1.0057							
174.000						1.1173									
180.000	1.4208	.9051	.6749	.5914	.5234	.6012		.9640		-.2744	-.3033	-.1041	-.1214	-.1118	
305.000			.5362	.3001	.3595	.3205		-.0010		-.1025					
320.000			.5015	.2071	.3843	.4308		-.2768		-.2794	-.0698	-.0585	-.1034	-.0079	-.0212
340.000			.4878	.1991	.4495	.6614		-.2339		-.2794					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	-.0247	.2301	.4748	.2110	-.2643	-.2916	-.2672		-.2191	-.2264					
40.000	-.0004	.1017	.2603	-.1674	-.3549	-.2885	-.3542		-.2246	-.2179					
70.000	-.0138	-.0758	-.0597	.1359	.0566	-.0302	-.1548								
90.000	-.0058	-.0410	.0831	.1201	.0225	-.0206	-.0771								
105.000			.1995	.1390	-.0647	-.0808	-.1013								
110.000								-.2277							
120.000	-.0199	-.0035	.2678	.1392	.0061	-.1293	-.1420	-.1917							
135.000			.3296	.3497	.0576	.0198	-.0155								
150.000	-.0373	-.0051	.3361	.3776	.1570	.1252	.0451								
165.000	-.0373		.3265		.4317	.2224	-.2259								
180.000	-.0376	-.0330	.3218	.4822											
320.000	-.0016	.2470	.4165	.2351	-.2295	-.2352	-.2566								

ARC11-019 IAB1 LVAP (ELHL SEALED) ORB. FUSELAGE

(RETB14)

ALPHA0 (1) = -6.258 BETA0 (3) = .056

SECTION (1) ORBITER FUSELAGE				DEPENDENT VARIABLE CP											
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.4120	.9817	.4398	.2139	.3511	.9538		-.1684		-.3715	.0155	.0565	-.0463	-.0861	-.0470
20.000			.4657	.2350	.3378	.6794		-.2459		-.2615					
40.000			.5860	.2920	.3291	.4712		-.1623		-.2999	-.0955	.0111	-.0466	-.2232	-.1165
55.000			.6466	.3952	.3344	.3355		.1179		-.0418					
70.000			.6618	.4259	.3183	.3198		.2053		.0499	-.3077	-.2579	-.1155	-.0513	
90.000		.8248	.6936	.4667	.3313	.3392		.2632		.0664	-.2691	-.2970	-.1500	-.0513	
120.000			.7214	.5514	.4190	.4780		.4941		.0522	-.1929	-.4131	-.2235	-.0665	
140.000										-.0716					
150.000			.7154	.5889	.4962	.5721			.6359	-.1879	-.3117	-.1934	-.1401	-.0988	
151.000															
156.000								.9124							
162.000									.7025						
165.000										-.1801	-.2862	-.1341	-.1267	-.1181	
169.000								.9992							
174.000						1.0962									
180.000	1.4120	.8996	.6873	.6024	.5315	.6105		.9862		-.2971	-.3068	-.0947	-.1208	-.1246	
305.000			.6172	.3824	.3865	.3458		.0423		-.0629					
320.000			.5533	.2517	.3630	.4667		-.2169		-.2685	-.0334	-.1003	-.0796	-.0312	-.0638
340.000			.5099	.2070	.3956	.6915		-.3058		-.2206					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.0151	.1991	.3645	.2596	-.2584	-.2808	-.2693			-.2216	-.2164				
40.000	-.0063	.1299	.2256	-.1266	-.2876	-.3034	-.3287			-.2225	-.2289				
70.000	-.0287	-.0980	-.0079	.1490	.0518	-.0466	-.1822								
90.000	-.0083	-.0703	.1174	.1344	-.0053	-.0317	-.0917								
105.000			.1862	.0603	-.0825	-.0990	-.1234								
110.000								-.2444							
120.000	-.0290	-.0209	.2510	.0828	-.0376	-.1732	-.2398	-.2239							
135.000			.3291	.3383	.0371	-.0195	-.0603								
150.000	-.0368	-.0128	.3381	.3799	.1463	.0667	-.0087								
165.000	-.0362		.3340		.3960	.1569	-.2283								
180.000	-.0334	-.0175	.3396	.5105											
320.000	-.0176	.1918	.3622	.0359	-.2944	-.2425	-.2877								

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## IABIA - PRESSURE SOURCE DATA TABULATION

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ARC11-019 IAB1 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB14)

ALPHA0( 1) = -6.244 BETA0 ( 4) = 2.126

SECTION ( 1) ORBITER FUSELAGE		DEPENDENT VARIABLE CP													
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.3934	.9668	.4419	.2290	.3561	.9849		-.1868		-.3115	-.0482	.0547	.0261	-.0247	-.0205
20.000			.4444	.2249	.3298	.6399		-.2042		-.3769					
40.000			.5268	.2534	.3150	.4310		-.2063		-.2454	-.0401	-.0147	-.0832	-.2291	-.1870
55.000			.5775	.3246	.2989	.3155		.0759		-.0767					
70.000			.5905	.3550	.2704	.2897		.1659		.0129	-.3346	-.3122	-.1470	-.0604	
90.000		.7344	.6251	.4029	.2741	.2994		.2291		.0238	-.3013	-.3266	-.1699	-.0594	
120.000			.6725	.5023	.3640	.4325		.4453		-.0003	-.2314	-.4307	-.2502	-.0935	
140.000										-.1474					
150.000			.6879	.5692	.4680	.5455				-.2192	-.2935	-.1845	-.1576	-.1442	
151.000									.5879						
156.000								.8690							
162.000									.6673						
165.000										-.1828	-.3131	-.1092	-.1303	-.1305	
169.000								.9806							
174.000						1.0856									
180.000	1.3934	.8883	.6936	.6025	.5225	.5997		.9853		-.2907	-.3013	-.1030	-.1204	-.1092	
305.000			.6948	.4663	.4179	.3812		.0678		-.0246					
320.000			.5952	.3112	.3640	.5020		-.1707		-.3100	.0142	-.1938	-.0904	-.0698	-.1572
340.000			.5274	.2407	.3744	.7249		-.3652		-.1946					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.0338	.1909	.3452	.2187	-.2616	-.2837	-.2633		-.2215	-.2205					
40.000	-.0558	.1701	.3430	.0740	-.3339	-.2588	-.2698		-.2254	-.2291					
70.000	-.0354	-.1104	.0127	.1620	.0423	-.0611	-.1900								
90.000	-.0236	-.0714	.1202	.1378	-.0204	-.0481	-.1037								
105.000			.1651	.0201	-.1005	-.1179	-.1382								
110.000								-.2537							
120.000	-.0481	-.0332	.2290	.0203	-.0844	-.2099	-.3127	-.2401							
135.000			.3036	.3040	.0100	-.0556	-.1029								
150.000	-.0562	-.0329	.3148	.3543	.1217	.0176	-.0529								
165.000	-.0531		.3231		.3613	.1130	-.2339								
180.000	-.0459	-.0292	.3306	.4859											
320.000	-.0001	.1806	.2732	-.1095	-.3147	-.2543	-.3332								

ARC11-019 1A81 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB14)

ALPHA0 (1) = -6.233 BETA0 (5) = 4.187

SECTION (1) ORBITER FUSELAGE		DEPENDENT VARIABLE CP													
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.4122	.9147	.4427	.3010	.3709	1.0245		-.1979		-.2687	-.1388	.0569	.0066	-.0288	-.1176
20.000			.4168	.2700	.3427	.6008		-.2212		-.4021					
40.000			.4535	.2570	.3161	.3941		-.2519		-.2706	-.0424	-.0167	-.1310	-.2876	-.2320
55.000			.4942	.2709	.2805	.3037		.0369		-.1136					
70.000			.5188	.2917	.2479	.2730		.1384		-.0274	-.3591	-.3492	-.1788	-.0756	
90.000		.6162	.5533	.3366	.2343	.2692		.1986		-.0264	-.3287	-.3577	-.1881	-.0864	
120.000			.6111	.4490	.3150	.3896		.3931		-.0471	-.2637	-.4559	-.2886	-.1357	
140.000										-.2000					
150.000			.6496	.5440	.4416	.5131				-.2364	-.3166	-.1549	-.1739	-.1740	
151.000									.5317						
156.000								.8268							
162.000									.6229						
165.000										-.1854	-.3231	-.1146	-.1432	-.1343	
169.000								.9491							
174.000						1.0581									
180.000	1.4122	.8607	.6853	.5972	.5182	.5897		.9658		-.2830	-.2846	-.1456	-.1255	-.1089	
305.000			.7832	.5576	.4698	.4103		.1045		.0110					
320.000			.6450	.3854	.3766	.5122		-.1335		-.2606	.0417	-.2123	-.1156	-.1107	-.1507
340.000			.5499	.3176	.3741	.7436		-.3618		-.1717					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.0592	.1800	.3772	.2273	-.2486	-.2862	-.2686		-.2297	-.2257					
40.000	-.1216	.1496	.3864	.1889	-.3634	-.2412	-.2631		-.2318	-.2312					
70.000	-.0388	-.1167	-.0011	.1818	.0371	-.0678	-.1950								
90.000	-.0379	-.0810	.1048	.1493	-.0426	-.0821	-.1309								
105.000			.1534	.0177	-.1115	-.1342	-.1532								
110.000								-.2612							
120.000	-.0714	-.0500	.1902	-.0392	-.1308	-.2556	-.3587	-.2541							
135.000			.2629	.2636	-.0163	-.1008	-.1495								
150.000	-.0810	-.0624	.2771	.3055	.0749	-.0325	-.1005								
165.000	-.0789		.2842		.3154	.0684	-.2485								
180.000	-.0751	-.0453	.2991	.4017											
320.000	-.0097	.1729	.2505	-.1751	-.3076	-.2773	-.3875								

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## IA81A - PRESSURE SOURCE DATA TABULATION

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ARC11-019 IA81 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB14)

ALPHA0( 2) = -4.204 BETA0 ( 1) = -6.151

SECTION ( 1) ORBITER FUSELAGE	DEPENDENT VARIABLE CP														
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.3433	.9546	.4429	.2533	.3545	1.0385		-.1507		-.2666	-.0482	-.0502	-.1061	-.2009	-.1206
20.000			.5476	.3262	.3214	.7500		-.3309		-.1562					
40.000			.7742	.4499	.3341	.4944		-.0660		-.2272	-.0802	-.1491	.0045	-.1755	-.0404
55.000			.8886	.6182	.4708	.3918		.1989		.0517					
70.000			.9104	.6544	.4838	.3782		.2792		.1503	-.2175	-.0518	-.0293	-.0258	
90.000		1.0636	.8795	.6557	.4795	.4016		.3503		.1953	-.1671	-.1966	-.0693	-.0248	
120.000			.8224	.6386	.4888	.4946		.6028		.2114	-.0863	-.3150	-.1191	-.0453	
140.000										.1803					
150.000			.7143	.5531	.4647	.5205				-.0454	-.3403	-.2534	-.1600	-.0853	
151.000									.7348						
156.000								.9806							
162.000									.7683						
165.000										-.1955	-.3030	-.2032	-.1544	-.1154	
169.000								1.0032							
174.000							1.0860								
180.000	1.3433	.8417	.5860	.4962	.4337	.4977		.8816		-.2947	-.3064	-.2044	-.1653	-.1513	
305.000			.3632	.1595	.3245	.2414		-.0859		-.2045					
320.000			.4000	.1729	.4080	.3212		-.3836		-.3453	-.1466	-.0569	-.1591	-.0320	.0476
340.000			.4564	.1989	.3849	.5978		-.1999		-.4395					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	-.0125	.2972	.5894	.2980	-.3694	-.3743	-.2728		-.2332	-.2308					
40.000	-.0444	.1267	.2660	-.2152	-.4073	-.2919	-.3999		-.2204	-.2159					
70.000	-.0020	-.0840	-.1331	.0137	.0223	-.0073	-.1417								
90.000	.0180	-.0434	-.0916	.1148	.0366	-.0116	-.0746								
105.000			-.0463	.1743	-.0424	-.0671	-.1007								
110.000								-.2215							
120.000	-.0555	-.0615	.2102	.2003	.0299	-.0995	-.0851	-.1584							
135.000			.2726	.2614	.0280	.0192	.0295								
150.000	-.1100	-.0888	.2636	.2607	.0705	.1832	.0777								
165.000	-.1333		.2329		.4729	.3264	-.1954								
180.000	-.1509	-.1064	.2047	.2384											
320.000	.0322	.3376	.5616	.3894	-.2060	-.2818	-.2572								

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## ARC11-019 1A81 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB14)

ALPHA( 2) = -4.193 BETA( 2) = -4.092

SECTION ( 1) ORBITER FUSELAGE				DEPENDENT VARIABLE CP											
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.3922	.9826	.4397	.2176	.3501	1.0271		-.1492		-.3173	-.0220	.0099	-.1099	-.2501	-.1599
20.000			.5225	.2869	.3338	.7402		-.3244		-.1900					
40.000			.7195	.3962	.3165	.5145		-.1010		-.3362	-.0847	-.1185	-.0102	-.1669	-.0921
55.000			.8096	.5477	.4246	.3651		.1587		.0176					
70.000			.8149	.5724	.4221	.3472		.2414		.1134	-.2448	-.1412	-.0703	-.0341	
90.000		.9533	.8042	.5591	.4311	.3684		.3127		.1484	-.1992	-.2334	-.1059	-.0394	
120.000			.7781	.6073	.4610	.4863		.5646		.1582	-.1154	-.3476	-.1632	-.0490	
140.000										.1235					
150.000			.7035	.5569	.4654	.5272				-.1008	-.3379	-.2222	-.1468	-.0896	
151.000									.7021						
156.000								.9498							
162.000									.7442						
165.000										-.1927	-.2836	-.2040	-.1446	-.1135	
169.000								.9916							
174.000						1.0864									
180.000	1.3922	.8355	.6081	.5278	.4520	.5228		.9082		-.2916	-.3211	-.1758	-.1539	-.1360	
305.000			.4494	.2111	.3088	.2690		-.0579		-.1675					
320.000			.4516	.1638	.3966	.3775		-.3344		-.3298	-.1120	-.0990	-.0944	-.0005	.0472
340.000			.4716	.1793	.4057	.6347		-.2145		-.4210					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	-.0277	.2876	.5725	.3030	-.2311	-.2673	-.2456		-.1971	-.1907					
40.000	.0156	.1072	.2607	-.1302	-.3443	-.3252	-.4165		-.1937	-.1949					
70.000	-.0206	-.0965	-.1407	.0556	.0505	-.0281	-.1567								
90.000	.0038	-.0603	-.0711	.0986	.0189	-.0216	-.0875								
105.000			.0575	.1441	-.0764	-.0804	-.1170								
110.000								-.2305							
120.000	-.0439	-.0430	.2449	.1860	.0170	-.1260	-.1201	-.1815							
135.000			.3030	.3042	.0390	.0070	-.0011								
150.000	-.0847	-.0455	.2968	.3098	.1021	.1450	.0594								
165.000	-.0894		.2777		.4335	.2619	-.2017								
180.000	-.0887	-.0628	.2644	.3308											
320.000	-.0188	.3043	.4904	.3413	-.2658	-.2097	-.2426								

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## IAB1A - PRESSURE SOURCE DATA TABULATION

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ARC11-019 IAB1 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB14)

ALPHA0( 2) = -4.164 BETA0( 3) = .031

SECTION ( 1) ORBITER FUSELAGE				DEPENDENT VARIABLE CP											
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.4453	.9901	.4358	.1682	.2658	.9475		-.1966		-.3859	-.0512	.0931	-.0057	-.0501	-.0234
20.000			.4636	.1995	.2593	.6578		-.3129		-.2706					
40.000			.5828	.2674	.2382	.4382		-.1970		-.3741	-.1265	-.0018	-.0519	-.2232	-.1243
55.000			.6438	.3740	.2931	.2724		.0810		-.0646					
70.000			.6602	.4078	.2996	.2551		.1723		.0302	-.3102	-.2940	-.1264	-.0697	
90.000		.7944	.6704	.4447	.3079	.2730		.2382		.0601	-.2772	-.3075	-.1726	-.0731	
120.000			.6776	.5107	.3705	.4074		.4779		.0428	-.2096	-.4229	-.2465	-.0787	
140.000										-.0749					
150.000			.6606	.5349	.4331	.4963			.6149	-.2056	-.3428	-.2284	-.1658	-.1187	
151.000															
156.000								.8857							
162.000									.6773						
165.000										-.2031	-.3173	-.1782	-.1587	-.1488	
169.000								.9696							
174.000						1.0658									
180.000	1.4453	.8270	.6289	.5460	.4632	.5327		.9562		-.3316	-.3344	-.1329	-.1531	-.1541	
305.000			.6068	.3584	.3279	.3024		.0119		-.0842					
320.000			.5473	.2239	.3031	.4412		-.2405		-.3241	-.0584	-.1171	-.0712	-.0268	-.0570
340.000			.5076	.1654	.2822	.6746		-.3664		-.2320					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.0327	.2031	.3544	.2415	-.2670	-.2813	-.2559		-.2167	-.2152					
40.000	.0076	.1491	.2288	-.0707	-.2953	-.3183	-.3371		-.2170	-.2252					
70.000	-.0538	-.1327	-.0732	.1072	.0141	-.0670	-.1909								
90.000	-.0291	-.0946	.0691	.0930	-.0372	-.0621	-.1132								
105.000			.1668	.0899	-.1198	-.1180	-.1425								
110.000								-.2563							
120.000	-.0443	-.0400	.2047	.0492	-.0428	-.1847	-.2547	-.2261							
135.000			.2852	.2908	.0150	-.0461	-.0800								
150.000	-.0514	-.0270	.2964	.3315	.1113	.0416	-.0303								
165.000	-.0520		.3007		.3535	.1274	-.2333								
180.000	-.0517	.0301	.3026	.4551											
320.000	-.0052	.2177	.3754	.0768	-.2900	-.2531	-.2939								



ARC11-019 IAB1 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB14)

ALPHA0( 2) = -4.142 BETA0( 4) = 4.151

SECTION ( 1) ORBITER FUSELAGE		DEPENDENT VARIABLE CP													
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.3847	.9416	.4509	.2502	.3311	1.0168		-.2146		-.2938	-.1850	.0908	.0398	-.0301	-.1220
20.000			.4219	.2294	.3029	.5884		-.2435		-.4272					
40.000			.4544	.2278	.2864	.3688		-.2789		-.3007	-.0815	-.0183	-.1435	-.2901	-.2468
55.000			.4835	.2536	.2492	.2623		.0099		-.1427					
70.000			.5053	.2740	.2145	.2216		.1184		-.0464	-.3719	-.3769	-.2025	-.1025	
90.000		.5865	.5347	.3190	.2089	.2188		.1843		-.0274	-.3474	-.3755	-.2196	-.1077	
120.000			.5770	.4182	.2821	.3247		.3832		-.0538	-.2830	-.4758	-.3059	-.1456	
140.000										-.2083					
150.000			.6010	.4972	.3882	.4387				-.2581	-.3458	-.2012	-.2102	-.2006	
151.000									.5119						
156.000								.8010							
162.000									.5977						
165.000										-.2105	-.3526	-.1550	-.1798	-.1633	
169.000								.9204							
174.000							1.0268								
180.000	1.3847	.7950	.6301	.5431	.4568	.5129		.9340		-.3088	-.3169	-.1876	-.1630	-.1394	
305.000			.7859	.5465	.4506	.3723		.0755		-.0025					
320.000			.6566	.3714	.3516	.4891		-.1536		-.2681	.0463	-.2376	-.1161	-.0907	-.1525
340.000			.5611	.2765	.3306	.7299		-.3830		-.1940					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.0567	.1998	.3870	.2486	-.2480	-.2788	-.2608		-.2178	-.2168					
40.000	-.1270	.1846	.4207	.2529	-.3628	-.2384	-.2540		-.2205	-.2205					
70.000	-.0590	-.1407	-.0298	.1445	.0182	-.0811	-.2098								
90.000	-.0506	-.1019	.0835	.1222	-.0572	-.0938	-.1461								
105.000			.1424	.0327	-.1227	-.1453	-.1753								
110.000								-.2779							
120.000	-.0730	-.0580	.1724	-.0417	-.1242	-.2602	-.3587	-.2443							
135.000			.2399	.2341	-.0231	-.1228	-.1641								
150.000	-.0953	-.0697	.2523	.2701	.0647	-.0537	-.1246								
165.000	-.0947		.2538		.2716	.0417	-.2471								
180.000	-.0966	-.0620	.2656	.3315											
320.000	.0198	.1937	.2631	-.1540	-.2983	-.2813	-.3948								

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ARC11-019 IAB1 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB14)

ALPHA0( 2) = -4.129 BETA0 ( 5) = 6.220

SECTION ( 1) ORBITER FUSELAGE				DEPENDENT VARIABLE CP											
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.3725	.9140	.4410	.2366	.2907	1.0029		-.2192		-.2505	-.2370	.0251	-.1002	-.0702	-.2137
20.000			.3842	.1958	.2734	.5397		-.2672		-.3860					
40.000			.3769	.1871	.2492	.3167		-.3227		-.3107	-.0026	-.0414	-.1837	-.2933	-.2587
55.000			.3968	.1892	.2093	.2213		-.0160		-.1743					
70.000			.4277	.2023	.1718	.1886		.0978		-.0713	-.3983	-.4036	-.2314	-.1043	
90.000		.4677	.4649	.2487	.1526	.1845		.1616		-.0571	-.3775	-.4013	-.2394	-.1234	
120.000			.5138	.3568	.2200	.2577		.3337		-.1000	-.3117	-.4907	-.3410	-.1757	
140.000															
150.000			.5447	.4544	.3454	.3841									
151.000									.4505						
156.000								.7542							
162.000									.5540						
165.000										-.2361	-.3632	-.1732	-.1832	-.1877	
169.000								.8900							
174.000						.9761									
180.000	1.3725	.7594	.6009	.5143	.4318	.4810		.8965		-.3175	-.2846	-.2088	-.1637	-.1607	
305.000			.8756	.6146	.4893	.3947		.1182		.0463					
320.000			.7083	.3960	.3345	.4785		-.1026		-.2091	.0754	-.2242	-.0758	-.2047	-.1207
340.000			.5717	.2675	.2976	.7403		-.4167		-.1553					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.0228	.1572	.3434	.2599	-.2618	-.2789	-.2665			-.2113	-.2146				
40.000	-.1170	.1522	.4513	.3315	-.3686	-.2334	-.2557			-.2247	-.2247				
70.000	-.0603	-.1404	-.0479	.1704	.0074	-.0837	-.2172								
90.000	-.0613	-.1091	.0664	.1109	-.0285	-.1118	-.1785								
105.000			.1188	.0539	-.1356	-.1489	-.1902								
110.000								-.2861							
120.000	-.0911	-.0628	.1179	-.0990	-.1623	-.2985	-.3981	-.2514							
135.000			.1757	.1718	-.0530	-.1599	-.2071								
150.000	-.1345	-.1062	.1905	.1968	.0206	-.1136	-.1655								
165.000	-.1466		.1949		.2162	.0033	-.2505								
180.000	-.1599	-.1099	.2104	.2327											
320.000	.0165	.1724	.2599	-.1811	-.3058	-.2870	-.4015								

ARC11-019 IAB1 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB14)

ALPHA( 3) = -2.093 BETA( 1) = -6.169

SECTION ( 1) ORBITER FUSELAGE		DEPENDENT VARIABLE CP													
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.3233	.9941	.4378	.2028	.2838	1.0290		-.1643		-.2919	-.1101	-.0804	-.0737	-.1875	-.1366
20.000			.5505	.2913	.2544	.7405		-.3626		-.1774					
40.000			.7901	.4321	.3079	.5025		-.0917		-.2909	-.1021	-.1512	.0149	-.1769	-.0418
55.000			.8898	.6104	.4575	.3526		.1575		.0308					
70.000			.8936	.6330	.4615	.3316		.2353		.1354	-.2270	-.0788	-.0443	-.0425	
90.000		1.0354	.8649	.6392	.4618	.3503		.3141		.1878	-.1757	-.2079	-.0864	-.0502	
120.000			.7711	.5885	.4339	.4095		.5738		.1887	-.1033	-.3293	-.1717	-.0824	
140.000										.1567					
150.000			.6521	.4903	.4033	.4210				-.0614	-.3680	-.2952	-.1937	-.1196	
151.000									.7090						
156.000								.9493							
162.000									.7404						
165.000										-.2282	-.3323	-.2419	-.1844	-.1506	
169.000								.9679							
174.000						1.0492									
180.000	1.3233	.7722	.5265	.4482	.3748	.4063		.8425		-.3195	-.3435	-.2388	-.1943	-.1819	
305.000			.3472	.1297	.2187	.2180		-.1271		-.2316					
320.000			.3944	.1163	.3401	.3094		-.4020		-.3742	-.1850	-.0967	-.1463	-.0185	.0398
340.000			.4504	.1396	.2647	.5906		-.2106		-.4491					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.0311	.3287	.6077	.3252	-.3118	-.3140	-.2688		-.2234	-.2112					
40.000	-.0272	.1222	.2713	-.1686	-.3784	-.3069	-.4231		-.1917	-.1920					
70.000	-.0343	-.1147	-.1643	-.1135	.0487	-.0261	-.1608								
90.000	.0019	-.0768	-.1261	.0922	.0034	-.0444	-.1008								
105.000			-.1094	.1724	-.0586	-.1377	-.1303								
110.000								-.2455							
120.000	-.1016	-.1169	.1545	.1776	.0226	-.1241	-.1260	-.1763							
135.000			.2455	.2080	.0009	-.0555	.0031								
150.000	-.1416	-.1231	.2257	.2027	-.0267	.1429	.0602								
165.000	-.1633		.2074		.4196	.2897	-.1940								
180.000	-.1686	-.1196	.1858	.1785											
320.000	.0881	.3872	.6086	.4423	-.2563	-.2278	-.2331								

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## TABIA - PRESSURE SOURCE DATA TABULATION

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ARC11-019 IAB1 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB14)

ALPHA( 3) = -2.078 BETA( 2) = -2.063

SECTION ( 1) ORBITER FUSELAGE		DEPENDENT VARIABLE CP													
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.4818	1.0135	.4372	.1466	.2105	1.0012		-.1799		-.3842	-.0421	-.0797	-.0616	-.2013	-.1742
20.000			.4919	.2120	.2285	.6977		-.3693		-.2386					
40.000			.6509	.3153	.2362	.4628		-.1545		-.3836	-.1640	-.0197	-.0175	-.1274	-.0857
55.000			.7189	.4517	.3429	.2864		.0930		-.0486					
70.000			.7284	.4780	.3463	.2529		.1837		.0589	-.2843	-.2650	-.1057	-.0687	
90.000		.8805	.7227	.5013	.3463	.2642		.2626		.0983	-.2464	-.2820	-.1855	-.0693	
120.000			.6870	.5165	.3747	.3713		.5116		.0928	-.1798	-.3935	-.2507	-.0830	
140.000										.0453					
150.000			.6272	.4957	.4010	.4283				-.1637	-.3685	-.2581	-.1845	-.1193	
151.000									.6423						
156.000								.8975							
162.000									.6892						
165.000										-.2190	-.3365	-.2373	-.1845	-.1438	
169.000								.9531							
174.000						1.0657									
180.000	1.4818	.7635	.5605	.4864	.4095	.4408		.9084		-.3303	-.3552	-.1771	-.1876	-.1702	
305.000			.5144	.2554	.2482	.2463		-.0588		-.1512					
320.000			.5032	.1612	.2363	.3807		-.3004		-.3014	-.1232	-.1144	-.0554	.0093	.0431
340.000			.4920	.1197	.1846	.6266		-.2650		-.3048					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.0841	.2719	.4923	.2163	-.2449	-.2797	-.2500		-.1986	-.1962					
40.000	.0378	.1514	.2864	-.1197	-.2868	-.3132	-.3902		-.1953	-.2017					
70.000	-.0625	-.1506	-.1688	.0287	.0052	-.0649	-.1878								
90.000	-.0327	-.1137	-.0765	.0728	-.0376	-.0705	-.1197								
105.000			.0818	.1042	-.1316	-.1264	-.1523								
110.000								-.2593							
120.000	-.0690	-.0588	.2132	.1474	-.0242	-.1694	-.2061	-.2130							
135.000			.2569	.2654	.0139	-.0485	-.0634								
150.000	-.0746	-.0411	.2597	.2809	.0813	.0712	-.0134								
165.000	-.0730		.2563		.3237	.1791	-.2223								
180.000	-.0715	-.0480	.2569	.3619											
320.000	.0487	.3116	.4793	.3157	-.2754	-.2055	-.2549								

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IAB1A - PRESSURE SOURCE DATA TABULATION

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ARC11-019 IAB1 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB14)

ALPHA0 ( 3 ) = -2.057 BETA0 ( 3 ) = 2.077

SECTION ( 1 ) ORBITER FUSELAGE				DEPENDENT VARIABLE CP											
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.4429	1.0052	.4479	.1828	.2832	.9961		-.2064		-.3513	-.1532	.0891	.0193	-.0572	-.0253
20.000			.4479	.1778	.2566	.6172		-.2439		-.4201					
40.000			.5270	.2222	.2392	.3875		-.2585		-.3165	-.1065	-.0253	-.0910	-.2294	-.2037
55.000			.5659	.2961	.2311	.2167		.0103		-.1242					
70.000			.5808	.3237	.2305	.1971		.1236		-.0156	-.3536	-.3623	-.1871	-.1011	
90.000		.6842	.5976	.3663	.2395	.1955		.1992		.0118	-.3212	-.3602	-.2411	-.1076	
120.000			.6020	.4343	.2964	.2956		.4239		-.0124	-.2648	-.4665	-.2909	-.1172	
140.000										-.1554					
150.000			.5938	.4746	.3702	.3895			.5516	-.2538	-.3676	-.2657	-.2182	-.1925	
151.000															
156.000								.8205							
162.000									.6229						
165.000										-.2323	-.3673	-.1917	-.1980	-.1906	
169.000								.9262							
174.000							1.0194								
180.000	1.4429	.7520	.5824	.5024	.4138	.4331		.9249		-.3492	-.3555	-.1855	-.1912	-.1664	
305.000			.7043	.4555	.3752	.3192		.0100		-.0750					
320.000			.6187	.2966	.3024	.4629		-.2104		-.3853	-.0203	-.2331	-.1045	-.0094	-.1540
340.000			.5404	.2025	.3080	.7105		-.4173		-.2389					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.0692	.2369	.3484	.2245	-.2507	-.2638	-.2473		-.2119	-.2116					
40.000	.0313	.2310	.3950	.2096	-.3634	-.2504	-.2753		-.2138	-.2260					
70.000	-.0846	-.1609	-.1019	.0942	-.0118	-.0892	-.2159								
90.000	-.0562	-.1143	.0405	.0731	-.0699	-.0939	-.1446								
105.000			.1400	.0625	-.1447	-.1448	-.1767								
110.000								-.2807							
120.000	-.0642	-.0562	.1680	-.0134	-.0812	-.2277	-.3149	-.2421							
135.000			.2428	.2447	-.0128	-.1004	-.1363								
150.000	-.0726	-.0540	.2537	.2715	.0636	-.0273	-.0949								
165.000	-.0760		.2605		.2884	.0617	-.2374								
180.000	-.0764	-.0571	.2593	.3702											
320.000	.0529	.2218	.2724	-.0624	-.2911	-.2843	-.3606								

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## IA81A - PRESSURE SOURCE DATA TABULATION

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ARC11-019 IA81 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB14)

ALPHA( 3) = -2.039 BETA( 4) = 6.185

## SECTION ( 1) ORBITER FUSELAGE

## DEPENDENT VARIABLE CP

X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.3781	.9617	.4393	.1870	.2470	.9997		-.2346		-.2697	-.2593	-.1107	-.0658	-.0705	-.1964
20.000			.3800	.1464	.2361	.5303		-.2845		-.4028					
40.000			.3662	.1505	.2074	.2999		-.3458		-.3319	-.1330	-.0694	-.1881	-.2129	-.1471
55.000			.3807	.1622	.1662	.1897		-.0423		-.1925					
70.000			.4075	.1820	.1327	.1494		.0810		-.0823	-.4078	-.4267	-.2541	-.1256	
90.000		.4438	.4456	.2285	.1324	.1413		.1559		-.0581	-.3842	-.4182	-.2739	-.1368	
120.000			.4812	.3282	.1966	.1962		.3256		-.1029	-.3270	-.5040	-.3560	-.1770	
140.000										-.2721					
150.000			.4989	.4111	.3061	.2951				-.3000	-.3904	-.2234	-.2492	-.2416	
151.000									.4321						
156.000								.7388							
162.000									.5312						
165.000										-.2618	-.3876	-.2055	-.2154	-.2109	
169.000								.8630							
174.000							.9547								
180.000	1.3781	.6919	.5452	.4643	.3814	.3778		.8639		-.3376	-.3199	-.2451	-.1975	-.1861	
305.000			.8830	.6067	.4678	.3704		.0878		.0204					
320.000			.7207	.3798	.2871	.4640		-.1148		-.2413	.0539	-.2278	-.0742	-.1914	-.1090
340.000			.5752	.2290	.2434	.7343		-.4446		-.1808					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.0301	.1945	.3652	.2604	-.2527	-.2701	-.2540		-.2014	-.2035					
40.000	-.0842	.2564	.4969	.3859	-.3713	-.2208	-.2416		-.2111	-.2117					
70.000	-.0613	-.1351	-.0744	.1430	-.0145	-.1013	-.2283								
90.000	-.0545	-.0936	.0479	.0987	-.0464	-.1211	-.1871								
105.000			.1195	.0733	-.1427	-.1604	-.2041								
110.000								-.2978							
120.000	-.0843	-.0376	.1192	-.0827	-.1521	-.2919	-.3936	-.2488							
135.000			.1585	.1490	-.0585	-.1663	-.2153								
150.000	-.1354	-.0797	.1684	.1648	.0068	-.1260	-.1750								
165.000	-.1589		.1740		.1703	-.0160	-.2438								
180.000	-.1840	-.1215	.1842	.1654											
320.000	.0384	.1973	.2663	-.1623	-.2828	-.2841	-.3967								

ARC11-019 IAB1 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB14)

ALPHA0( 4) = .021 BETA0 ( 1) = -6.181

SECTION ( 1) ORBITER FUSELAGE		DEPENDENT VARIABLE CP													
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.4130	.9994	.4242	.1694	.2232	1.0344		-.1818		-.2899	-.1426	-.2060	-.0570	-.1607	-.1446
20.000			.5447	.2643	.1982	.7315		-.3771		-.1822					
40.000			.7889	.4159	.2817	.5035		-.0968		-.2852	-.1445	-.1867	.0322	-.1412	-.0417
55.000			.8962	.6024	.4416	.3164		.1319		.0301					
70.000			.8937	.6250	.4453	.2811		.1962		.1297	-.2209	-.0997	-.0771	-.0529	
90.000		1.0435	.8542	.6253	.4369	.3045		.2763		.1882	-.1814	-.1938	-.1629	-.0650	
120.000			.7214	.5396	.3801	.3417		.5625		.1705	-.1196	-.3291	-.2384	-.1251	
140.000										.1348					
150.000			.5873	.4307	.3476	.3308				-.0783	-.3986	-.3291	-.2235	-.1527	
151.000									.6860						
156.000								.9233							
162.000									.7089						
165.000										-.2597	-.3619	-.2756	-.2149	-.1827	
169.000								.9329							
174.000							1.0357								
180.000	1.4130	.6971	.4637	.3939	.3220	.3148		.8042		-.3442	-.3799	-.2715	-.2220	-.2156	
305.000			.3264	.0973	.1761	.1968		-.1627		-.2572					
320.000			.3794	.0726	.1924	.2945		-.4105		-.3989	-.2088	-.1690	-.1406	-.0287	.0193
340.000			.4394	.0915	.1849	.5778		-.2168		-.4476					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.0692	.3729	.6345	.3545	-.2549	-.3067	-.2419		-.1770	-.1785					
40.000	.0683	.1768	.3074	-.1306	-.3398	-.3160	-.4329		-.1511	-.1526					
70.000	-.0489	-.1406	-.1898	-.1979	-.0028	-.0548	-.1823								
90.000	-.0194	-.1009	-.1582	.0496	-.0266	-.0870	-.1286								
105.000			-.1449	.1274	-.0737	-.1645	-.1699								
110.000								-.2689							
120.000	-.1468	-.1626	.1184	.1382	.0013	-.1401	-.1792	-.2084							
135.000			.2030	.1751	-.0201	-.1212	-.0290								
150.000	-.1762	-.1529	.2039	.1840	-.0740	.1101	.0250								
165.000	-.1902		.1875		.4096	.2743	-.1957								
180.000	-.1772	-.1090	.1729	.1868											
320.000	.1275	.4508	.6534	.4988	-.2834	-.2050	-.2183								

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## IAB1A - PRESSURE SOURCE DATA TABULATION

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ARC11-019 IAB1 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB14)

ALPHA0( 4) = .023 BETA0( 2) = -4.121

SECTION ( 1) ORBITER FUSELAGE		DEPENDENT VARIABLE CP													
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.4583	1.0227	.4316	.1408	.1938	1.0224		-.1728		-.3308	-.0781	-.1669	-.0528	-.1871	-.1687
20.000			.5205	.2278	.1876	.7172		-.3879		-.2000					
40.000			.7250	.3661	.2485	.4832		-.1312		-.3373	-.1549	-.1884	-.0246	-.0469	-.0734
55.000			.8082	.5279	.3878	.2879		.0916		-.0125					
70.000			.8013	.5499	.3915	.2483		.1629		.0802	-.2526	-.1545	-.1286	-.0732	
90.000		.9471	.7745	.5542	.3832	.2664		.2457		.1304	-.2141	-.2373	-.2048	-.0750	
120.000			.6850	.5140	.3657	.3264		.5262		.1268	-.1595	-.3611	-.2314	-.1082	
140.000										.0865					
150.000			.5826	.4465	.3573	.3436				-.1362	-.3968	-.3119	-.2106	-.1446	
151.000									.6530						
156.000								.8999							
162.000									.6849						
165.000										-.2459	-.3517	-.2720	-.2066	-.1743	
169.000								.9291							
174.000						1.0428									
180.000	1.4583	.6965	.4886	.4215	.3488	.3358		.8438		-.3406	-.3859	-.2422	-.2171	-.1944	
305.000			.4190	.1675	.1805	.2152		-.1309		-.2185					
320.000			.4450	.1003	.1895	.3408		-.3637		-.3723	-.1694	-.1797	-.0586	.0096	.0146
340.000			.4673	.0864	.1358	.5992		-.2338		-.4369					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1316	.3558	.5868	.3599	-.2541	-.2705	-.2383		-.1759	-.1786					
40.000	.0718	.1716	.3133	-.1032	-.3099	-.3284	-.4153		-.1476	-.1698					
70.000	-.0573	-.1517	-.1912	-.0883	-.0031	-.0629	-.1850								
90.000	-.0269	-.1102	-.1580	.0610	-.0409	-.0852	-.1328								
105.000			-.1243	.1328	-.0942	-.1769	-.1657								
110.000								-.2700							
120.000	-.1176	-.1215	.1963	.1568	-.0142	-.1561	-.1834	-.2200							
135.000			.2431	.2262	-.0207	-.0745	-.0589								
150.000	-.1325	-.0803	.2378	.2330	-.0096	.0801	-.0006								
165.000	-.1219		.2257		.3427	.1980	-.2194								
180.000	-.1120	-.0447	.2127	.2469											
320.000	.0966	.4087	.5844	.4378	-.2987	-.1840	-.2302								



ARC11-019 IAB1 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB14)

ALPHA0( 4) = .027 BETA0 ( 3) = -2.070

SECTION ( 1)ORBITER FUSELAGE				DEPENDENT VARIABLE CP											
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.4709	1.0284	.4354	.1159	.1601	.9810		-.1956		-.3804	-.0596	-.1541	.0030	-.1094	-.0854
20.000			.4938	.1874	.1713	.6824		-.3910		-.2380					
40.000			.6540	.3044	.2044	.4412		-.1686		-.3786	-.1774	-.1208	-.0248	-.0868	-.0699
55.000			.7159	.4412	.3301	.2486		.0525		-.0593					
70.000			.7144	.4648	.3307	.2085		.1377		.0439	-.2841	-.2325	-.1766	-.0855	
90.000		.8654	.7068	.4799	.3258	.2267		.2328		.0922	-.2586	-.2714	-.2302	-.0812	
120.000			.6512	.4805	.3339	.3048		.5007		.0760	-.2029	-.4011	-.2540	-.1054	
140.000										.0278					
150.000			.5738	.4434	.3540	.3439				-.1886	-.3973	-.2887	-.2042	-.1552	
151.000									.6243						
156.000								.8810							
162.000									.6639						
165.000										-.2468	-.3730	-.2667	-.2104	-.1751	
169.000								.9287							
174.000						1.0602									
180.000	1.4709	.7080	.5033	.4394	.3630	.3499		.8822		-.3627	-.3827	-.2100	-.2150	-.1912	
305.000			.5058	.2415	.2217	.2195		-.0890		-.1734					
320.000			.5013	.1385	.1916	.3565		-.3076		-.3161	-.1355	-.1723	-.0310	.0175	.0222
340.000			.4898	.0892	.1322	.6042		-.2807		-.3093					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1260	.3031	.5084	.2303	-.2374	-.2572	-.2350		-.1940	-.1894					
40.000	.0798	.1874	.3105	-.0927	-.2659	-.3400	-.4177		-.1748	-.1681					
70.000	-.0715	-.1707	-.1912	-.0169	-.0097	-.0751	-.1928								
90.000	-.0389	-.1295	-.1441	.0661	-.0630	-.0974	-.1438								
105.000			.0197	.1231	-.1364	-.1767	-.1779								
110.000								-.2735							
120.000	-.0904	-.0751	.2105	.1459	-.0363	-.1832	-.2207	-.2195							
135.000			.2504	.2394	-.0149	-.0845	-.0873								
150.000	-.0845	-.0265	.2383	.2459	.0148	.0445	-.0358								
165.000	-.0789		.2368		.2847	.1370	-.2297								
180.000	-.0743	-.0165	.2402	.2949											
320.000	.1056	.3458	.4973	.3383	-.3062	-.2018	-.2524								

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## IABIA - PRESSURE SOURCE DATA TABULATION

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ARC11-019 IAB1 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB14)

ALPHA0 (4) = .027 BETA0 (4) = -.007

SECTION (1) ORBITER FUSELAGE		DEPENDENT VARIABLE CP													
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.4667	1.0232	.4325	.1058	.1653	.9229		-.2089		-.4044	-.0812	-.1111	.0498	-.0058	-.0119
20.000			.4660	.1424	.1597	.6192		-.3425		-.3248					
40.000			.5884	.2351	.1420	.3920		-.2244		-.4302	-.1565	-.1061	-.0361	-.2196	-.1269
55.000			.6355	.3493	.2524	.2058		.0047		-.1129					
70.000			.6396	.3757	.2621	.1703		.1004		.0055	-.3336	-.3072	-.1668	-.0967	
90.000		.7788	.6443	.4085	.2695	.1791		.2042		.0425	-.2981	-.3266	-.2624	-.0992	
120.000			.6159	.4417	.3014	.2706		.4519		.0215	-.2449	-.4405	-.2804	-.1119	
140.000										-.0818					
150.000			.5628	.4389	.3440	.3327				-.2418	-.3980	-.2940	-.2248	-.1661	
151.000									.5768						
156.000								.8392							
162.000									.6303						
165.000										-.2508	-.3778	-.2527	-.2211	-.1903	
169.000								.9163							
174.000							1.0352								
180.000	1.4667	.6954	.5169	.4507	.3707	.3596		.8980		-.3905	-.3865	-.1997	-.2149	-.1931	
305.000			.5925	.3346	.2923	.2484		-.0541		-.1381					
320.000			.5491	.2016	.2143	.3985		-.2627		-.3946	-.0946	-.2074	-.0325	-.0029	-.0116
340.000			.5035	.1110	.1861	.6517		-.4097		-.2573					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1099	.2572	.3822	.2568	-.2423	-.2566	-.2420		-.2106	-.2100					
40.000	.0813	.2115	.2770	.0303	-.3013	-.3445	-.3611		-.1913	-.2093					
70.000	-.0896	-.1835	-.1895	.0058	-.0363	-.0970	-.2100								
90.000	-.0573	-.1310	-.0459	.0496	-.0895	-.1128	-.1528								
105.000			.1086	.0738	-.1808	-.1581	-.1829								
110.000								-.2818							
120.000	-.0738	-.0540	.1861	.1276	-.0367	-.1907	-.2607	-.2362							
135.000			.1802	.2289	.0444	-.0719	-.1186								
150.000	-.0723	-.0251	.1972	.2649	.0670	.0058	-.0713								
165.000	-.0713		.2310		.2711	.0789	-.2278								
180.000	-.0738	-.0329	.2438	.3715											
320.000	.0887	.2913	.4147	.1416	-.2991	-.2591	-.3036								

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ARC11-019 IAB1 LVAP (ELHL SEALED) ORB. FUSELAGE

(RETB14)

ALPHA0 ( 4 ) = .038 BETA0 ( 5 ) = 4.112

SECTION ( 1 ) ORBITER FUSELAGE		DEPENDENT VARIABLE CP													
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.3944	1.0200	.4456	.1548	.2216	1.0137		-.2340		-.3089	-.2080	-.0884	.0335	-.0063	-.0012
20.000			.4140	.1411	.2018	.5734		-.2856		-.4436					
40.000			.4415	.1700	.1894	.3397		-.3126		-.3440	-.1548	-.1362	-.1116	-.1194	-.0750
55.000			.4614	.2173	.1690	.1988		-.0603		-.1770					
70.000			.4756	.2387	.1625	.1456		.0769		-.0669	-.3864	-.4063	-.2400	-.1241	
90.000		.5387	.5006	.2830	.1736	.1359		.1625		-.0278	-.3584	-.3979	-.3045	-.1287	
120.000			.5133	.3598	.2273	.2041		.3711		-.0601	-.3078	-.4996	-.3322	-.1473	
140.000										-.2182					
150.000			.5085	.4116	.3077	.2861				-.2909	-.3945	-.2726	-.2599	-.2365	
151.000									.4797						
156.000								.7622							
162.000									.5551						
165.000										-.2568	-.4000	-.2202	-.2336	-.2120	
169.000								.8708							
174.000							.9454								
180.000	1.3944	.6601	.5199	.4471	.3616	.3252		.8810		-.3543	-.3702	-.2509	-.2199	-.1912	
305.000			.8007	.5230	.4110	.3064		.0191		-.0473					
320.000			.6835	.3263	.2580	.4341		-.1665		-.2913	.0123	-.2810	-.0928	.0205	-.1508
340.000			.5664	.1894	.2229	.7057		-.4275		-.2204					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.0952	.2576	.4062	.2889	-.2349	-.2607	-.2423		-.1950	-.1993					
40.000	.0211	.2852	.4986	.3674	-.3592	-.2226	-.2430		-.1975	-.2075					
70.000	-.0694	-.1547	-.1108	.0715	-.0254	-.1066	-.2293								
90.000	-.0456	-.1011	.0170	.0666	-.0756	-.1339	-.1793								
105.000			.1246	.0839	-.1605	-.1683	-.2041								
110.000								-.3005							
120.000	-.0611	-.0292	.1426	-.0359	-.1060	-.2551	-.3524	-.2449							
135.000			.1987	.1929	-.0254	-.1407	-.1852								
150.000	-.0912	-.0264	.2092	.2196	.0496	-.0779	-.1513								
165.000	-.1020		.2108		.1845	.0038	-.2452								
180.000	-.1147	-.0568	.2188	.2589											
320.000	.0998	.2409	.2920	-.1184	-.2691	-.2744	-.3819								

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## IA81A - PRESSURE SOURCE DATA TABULATION

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ARC11-019 IA81 LVAP(ELHL SEALED) ORB. FUSELAGE

(RET814)

ALPHA0( 4) = .051 BETA0( 6) = 6.174

SECTION ( 1) ORBITER FUSELAGE				DEPENDENT VARIABLE CP											
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.3702	.9910	.4303	.1509	.1816	1.0003		-.2530		-.2813	-.2927	-.1904	.0427	-.0512	-.1296
20.000			.3706	.1110	.1785	.5199		-.2983		-.4211					
40.000			.3514	.1237	.1583	.2874		-.3616		-.3563	-.1580	-.1618	-.1535	-.0832	-.0107
55.000			.3618	.1425	.1184	.1610		-.1014		-.2127					
70.000			.3867	.1617	.1026	.1116		.0583		-.0952	-.4184	-.4427	-.2729	-.1346	
90.000		.4152	.4243	.2128	.1106	.0994		.1423		-.0611	-.3914	-.4260	-.3181	-.1436	
120.000			.4509	.3023	.1729	.1485		.3256		-.1073	-.3416	-.5128	-.3631	-.1765	
140.000										-.2778					
150.000			.4581	.3751	.2687	.2223				-.3189	-.4141	-.2515	-.2720	-.2625	
151.000									.4146						
156.000								.7201							
162.000									.5052						
165.000										-.2859	-.4135	-.2338	-.2403	-.2339	
169.000								.8358							
174.000							.9430								
180.000	1.3702	.6239	.4932	.4178	.3356	.2927		.8330		-.3578	-.3553	-.2716	-.2224	-.2131	
305.000			.8833	.6005	.4514	.3384		.0592		-.0037					
320.000			.7262	.3741	.2508	.4492		-.1262		-.2458	.0557	-.2527	-.0671	-.1489	-.0958
340.000			.5754	.2017	.1720	.7221		-.4639		-.1839					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.0942	.2354	.3926	.2775	-.2392	-.2662	-.2430		-.1911	-.1917					
40.000	.0104	.3208	.5557	.4497	-.3651	-.2097	-.2352		-.2036	-.2072					
70.000	-.0595	-.1495	-.1027	.0862	-.0189	-.1138	-.2346								
90.000	-.0393	-.0998	.0245	.0822	-.0676	-.1387	-.1949								
105.000			.1147	.0970	-.1498	-.1722	-.2107								
110.000								-.3005							
120.000	-.0629	-.0124	.1312	-.0586	-.1362	-.2809	-.3815	-.2548							
135.000			.1467	.1350	-.0629	-.1706	-.2213								
150.000	-.1209	-.0168	.1622	.1487	-.0102	-.1380	-.1899								
165.000	-.1529		.1724		.1635	-.0356	-.2464								
180.000	-.1942	-.1151	.1774	.1856											
320.000	.0870	.2363	.2893	-.1520	-.2628	-.2753	-.3874								

ARC11-019 IAB1 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB14)

ALPHA0( 5) = 2.131 BETA0 ( 1) = -5.166

## SECTION ( 1) ORBITER FUSELAGE

## DEPENDENT VARIABLE CP

X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.4142	1.0097	.4226	.1358	.1687	1.0091		-.1800		-.2777	-.1440	-.2343	-.0540	-.1445	-.1325
20.000			.5438	.2411	.1508	.7215		-.3836		-.1678					
40.000			.7923	.4077	.2625	.5125		-.0852		-.2457	-.1533	-.1992	.0495	-.0859	-.0249
55.000			.8905	.5922	.4279	.2909		.1408		.0275					
70.000			.8826	.6120	.4273	.2428		.1793		.1371	-.2054	-.1179	-.1182	-.0685	
90.000		1.0410	.8422	.6028	.4099	.2638		.2364		.2104	-.1741	-.1976	-.1941	-.0828	
120.000			.6982	.5083	.3401	.2920		.5665		.1738	-.1195	-.3385	-.3007	-.1686	
140.000										.1294					
150.000			.5312	.3749	.2963	.2682				-.0779	-.4196	-.3546	-.2532	-.1871	
151.000									.6706						
156.000								.9142							
162.000								.6859							
165.000										-.2871	-.3827	-.3010	-.2353	-.2165	
169.000								.9148							
174.000							1.0402								
180.000	1.4142	.6413	.4033	.3477	.2740	.2491		.7757		-.3597	-.3966	-.2948	-.2443	-.2420	
305.000			.3152	.0715	.1376	.1784		-.1846		-.2744					
320.000			.3743	.0421	.1288	.2798		-.4224		-.3989	-.2231	-.1950	-.1287	-.0470	.0504
340.000			.4362	.0600	.1123	.5564		-.2237		-.4113					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.0712	.4185	.6633	.3801	-.2742	-.3017	-.2208		-.1746	-.1819					
40.000	.1198	.2287	.3553	-.1253	-.3395	-.2578	-.3829		-.1191	-.1557					
70.000	-.0470	-.1601	-.2106	-.2415	-.0432	-.0744	-.1945								
90.000	-.0193	-.1244	-.1839	.0104	-.0448	-.1215	-.1500								
105.000			-.1722	.0941	-.0807	-.1837	-.2090								
110.000								-.2814							
120.000	-.1846	-.2078	.1167	.1011	-.0094	-.1553	-.1947	-.2283							
135.000			.1616	.1513	-.0292	-.1295	-.0550								
150.000	-.1985	-.1591	.1725	.1667	-.0367	.0798	-.0102								
165.000	-.1976		.1708		.3987	.2543	-.2093								
180.000	-.1619	-.0513	.1647	.2014											
320.000	.1376	.5130	.6835	.5439	-.2643	-.2128	-.2279								

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## 1A81A - PRESSURE SOURCE DATA TABULATION

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ARC11-019 1A81 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB14)

ALPHA( 5) = 2.132 BETA( 2) = -2.063

SECTION ( 1) ORBITER FUSELAGE		DEPENDENT VARIABLE CP													
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.4542	1.0412	.4248	.0739	.1011	.9347		-.2118		-.3121	-.0815	-.2040	-.0171	.0415	.0634
20.000			.4867	.1433	.1027	.6525		-.4198		-.1830					
40.000			.6567	.2768	.1625	.4163		-.1721		-.3643	-.2152	-.1651	-.0577	-.0590	-.0599
55.000			.7119	.4249	.3056	.1986		.0356		-.0526					
70.000			.7037	.4423	.3074	.1600		.0917		.0448	-.2780	-.2186	-.2190	-.1105	
90.000		.8490	.6886	.4568	.3037	.1860		.1749		.0988	-.2547	-.2783	-.2696	-.1080	
120.000			.6205	.4385	.2941	.2555		.4816		.0625	-.2115	-.3955	-.2733	-.1372	
140.000										.0081					
150.000			.5255	.3902	.3085	.2790				-.2152	-.4216	-.3195	-.2280	-.1790	
151.000									.6035						
156.000								.8656							
162.000									.6374						
165.000										-.2724	-.4011	-.2993	-.2293	-.1979	
169.000								.9060							
174.000						1.0492									
180.000	1.4542	.6654	.4491	.3867	.3195	.2778		.8547		-.3977	-.4064	-.2444	-.2373	-.2025	
305.000			.4908	.2241	.2074	.1954		-.1116		-.1831					
320.000			.4859	.1172	.1535	.3348		-.3121		-.2979	-.1493	-.2292	-.0457	.0138	.0299
340.000			.4748	.0506	.0958	.5806		-.3360		-.2873					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1431	.3315	.5176	.2468	-.2319	-.2611	-.2406		-.1892	-.1841					
40.000	.1118	.2233	.3303	-.0843	-.2567	-.3284	-.4059		-.1715	-.1682					
70.000	-.0816	-.1840	-.2188	-.0620	-.0441	-.0990	-.2117								
90.000	-.0473	-.1458	-.1763	.0434	-.0866	-.1204	-.1680								
105.000			-.0725	.1098	-.1476	-.2152	-.2068								
110.000								-.2869							
120.000	-.1189	-.1028	.1874	.1453	-.0565	-.2018	-.2428	-.2469							
135.000			.2394	.2159	-.0525	-.1304	-.1161								
150.000	-.0901	.0023	.2208	.2163	-.0438	.0078	-.0633								
165.000	-.0798		.2133		.2478	.0973	-.2360								
180.000	-.0712	.0351	.2227	.2556											
320.000	.0990	.3759	.5073	.3415	-.2800	-.2052	-.2522								

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ARC11-019 1A81 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB14)

ALPHA( 5) = 2.136 BETA( 3) = 2.064

SECTION ( 1) ORBITER FUSELAGE		DEPENDENT VARIABLE CP													
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.4385	1.0421	.4553	.1369	.2046	.9826		-.2336		-.3369	-.1516	-.1601	.0128	.0053	.0348
20.000			.4534	.1453	.1875	.5938		-.2728		-.4217					
40.000			.5266	.2053	.1693	.3603		-.2666		-.3830	-.1131	-.1415	-.0064	-.0318	-.1211
55.000			.5541	.2851	.2089	.1678		-.0438		-.1454					
70.000			.5553	.3012	.2098	.1404		.0459		-.0241	-.3471	-.3461	-.2376	-.1063	
90.000		.6512	.5635	.3359	.2151	.1386		.1638		.0180	-.3213	-.3513	-.3173	-.1023	
120.000			.5456	.3767	.2451	.2083		.4154		-.0187	-.2856	-.4583	-.3004	-.1221	
140.000										-.1538					
150.000			.5033	.3910	.2961	.2622				-.2787	-.4138	-.3124	-.2438	-.2007	
151.000									.5242						
156.000								.7886							
162.000									.5799						
165.000										-.2696	-.4045	-.2447	-.2386	-.2085	
169.000								.8762							
174.000							.9895								
180.000	1.4385	.6196	.4815	.4122	.3315	.2891		.8660		-.3914	-.3939	-.2354	-.2290	-.2016	
305.000			.7103	.4354	.3509	.2637		-.0290		-.0948					
320.000			.6398	.2779	.2335	.4162		-.2060		-.3439	-.0455	-.2892	-.0720	.1063	-.0669
340.000			.5503	.1578	.2085	.6819		-.4393		-.2156					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1510	.3014	.4098	.2807	-.2233	-.2466	-.2358		-.1933	-.1994					
40.000	.1156	.2949	.4469	.2609	-.3370	-.2383	-.2690		-.1915	-.2033					
70.000	-.0889	-.1828	-.1907	-.0024	-.0394	-.1057	-.2178								
90.000	-.0456	-.1308	-.0556	.0484	-.0988	-.1221	-.1725								
105.000			.0919	.0831	-.1880	-.1751	-.2050								
110.000								-.2811							
120.000	-.0626	-.0358	.1668	.1140	-.0744	-.2215	-.2960	-.2352							
135.000			.1884	.1654	-.0308	-.1191	-.1564								
150.000	-.0626	.0246	.2132	.1905	.0079	-.0592	-.1217								
165.000	-.0673		.2110		.2018	.0211	-.2303								
180.000	-.0738	.0699	.2110	.2326											
320.000	.1484	.2809	.3334	-.0031	-.2915	-.2593	-.3503								

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## IABIA - PRESSURE SOURCE DATA TABULATION

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ARC11-019 IAB1 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB14)

ALPHA0( 5) = 2.148 BETAC ( 4) = 6.175

SECTION ( 1) ORBITER FUSELAGE		DEPENDENT VARIABLE CP													
X/LB	.0000	.0060	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.3993	1.0009	.4228	.1254	.1373	.9871		-.2510		-.2667	-.3035	-.2689	.0775	-.0194	.0002
20.000			.3587	.0836	.1432	.5101		-.2957		-.4263					
40.000			.3337	.1022	.1320	.2778		-.3711		-.3754	-.1232	-.2238	-.1141	-.0892	.0417
55.000			.3381	.1248	.0949	.1455		-.1243		-.2286					
70.000			.3625	.1440	.0806	.0872		.0029		-.1081	-.4178	-.4325	-.2922	-.1208	
90.000		.3866	.4032	.1920	.0887	.0796		.1318		-.0650	-.3942	-.4246	-.3555	-.1295	
120.000			.4231	.2781	.1499	.1206		.3211		-.1061	-.3532	-.5197	-.3601	-.1701	
140.000										-.2845					
150.000			.4130	.3360	.2349	.1766				-.3343	-.4321	-.2727	-.2894	-.2717	
151.000									.3985						
156.000								.7187							
162.000									.4820						
165.000										-.3057	-.4321	-.2529	-.2615	-.2493	
169.000								.8187							
174.000						.9298									
180.000	1.3993	.5541	.4355	.3696	.2962	.2404		.8084		-.3753	-.3759	-.2963	-.2426	-.2357	
305.000			.8846	.6009	.4438	.3089		.0663		.0223					
320.000			.7358	.3736	.2343	.4428		-.1056		-.2223	.0190	-.2671	-.0588	-.0730	-.0727
340.000			.5779	.1813	.1227	.7102		-.4710		-.1552					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1313	.2898	.4232	.2816	-.2297	-.2529	-.2353		-.1699	-.1727					
40.000	.0801	.3797	.6085	.5093	-.3504	-.1899	-.2269		-.1925	-.1958					
70.000	-.0618	-.1585	-.1508	.0137	-.0280	-.1263	-.2384								
90.000	-.0329	-.0996	-.0267	.0631	-.0897	-.1579	-.2014								
105.000			.0760	.1087	-.1788	-.1830	-.2257								
110.000								-.2828							
120.000	-.0574	-.0022	.1275	.0415	-.1297	-.2679	-.3701	-.2530							
135.000			.1366	.1464	-.0518	-.1738	-.2272								
150.000	-.0968	.0400	.1413	.1548	-.0192	-.1495	-.2076								
165.000	-.1290		.1469		.1121	-.0616	-.2486								
180.000	-.1839	-.0338	.1621	.1901											
320.000	.1376	.2709	.3098	-.1363	-.2498	-.2617	-.3748								



ARC11-019 IAB1 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB14)

ALPHA0( 6) = 4.219 BETA0 ( 1) = -6.143

## SECTION ( 1) ORBITER FUSELAGE

## DEPENDENT VARIABLE CP

X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.3942	1.0131	.4168	.0996	.1122	.9725		-.1710		-.2582	-.1386	-.2509	-.0547	-.1217	-.0891
20.000			.5476	.2133	.0983	.7120		-.3813		-.1561					
40.000			.7901	.3983	.2445	.5287		-.0444		-.2347	-.1616	-.2043	.0510	-.0188	-.0306
55.000			.8827	.5853	.4170	.2635		.1549		.0288					
70.000			.8653	.5903	.4083	.2201		.1880		.1312	-.2055	-.1334	-.1247	-.0895	
90.000		1.0143	.8141	.5761	.3891	.2323		.2217		.2240	-.1719	-.1898	-.1985	-.1121	
120.000			.6701	.4686	.2901	.2458		.5951		.1748	-.1300	-.3461	-.3408	-.2246	
140.000										.1204					
150.000			.4907	.3149	.2453	.2195			.6776	-.0646	-.4489	-.3888	-.2838	-.2158	
151.000															
156.000								.9215							
162.000									.6822						
165.000										-.3279	-.4063	-.3374	-.2621	-.2400	
169.000								.9169							
174.000							1.0183								
180.000	1.3942	.6223	.3496	.3027	.2268	.1982		.7675		-.3864	-.4150	-.3203	-.2662	-.2586	
305.000			.3016	.0410	.0934	.1590		-.1978		-.3089					
320.000			.3605	.0029	.0737	.2577		-.4175		-.3388	-.2528	-.1353	-.0771	-.0287	.0639
340.000			.4255	.0258	.0543	.5301		-.1970		-.3413					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1782	.4303	.6687	.3881	-.2929	-.3085	-.2174		-.1822	-.1755					
40.000	.1426	.2515	.3572	-.1492	-.3490	-.2672	-.3679		-.1200	-.1633					
70.000	-.0690	-.1824	-.2419	-.2699	-.0868	-.0946	-.2093								
90.000	-.0350	-.1443	-.2168	-.0233	-.0790	-.1483	-.1733								
105.000			-.1988	.0552	-.1029	-.1949	-.2333								
110.000								-.2878							
120.000	-.2357	-.2757	.0780	.0585	-.0279	-.1661	-.1998	-.2414							
135.000			.0884	.1206	-.0201	-.1179	-.0779								
150.000	-.2159	-.1439	.1135	.1501	.0069	.0462	-.0360								
165.000	-.1830		.1262		.3644	.2147	-.2175								
180.000	-.1369	.0414	.1149	.1882											
320.000	.2123	.5098	.6803	.5216	-.2880	-.2181	-.2340								

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## IAB1A - PRESSURE SOURCE DATA TABULATION

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ARC11-019 IAB1 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETR14)

ALPHA0( 6) = 4.218 BETA0( 2) = -4.089

SECTION ( 1) ORBITER FUSELAGE				DEPENDENT VARIABLE CP											
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.4216	1.0401	.4218	.0749	.0826	.9655		-.1770		-.2842	-.0633	-.2355	.0339	.0639	.0164
20.000			.5227	.1774	.0652	.6781		-.3696		-.1824					
40.000			.7296	.3393	.1943	.4715		-.0954		-.2010	-.1914	-.1812	.0001	-.0055	-.0068
55.000			.7974	.5074	.3572	.2289		.1012		-.0134					
70.000			.7785	.5142	.3516	.1691		.1507		.0857	-.2315	-.1635	-.1764	-.1083	
90.000		.9231	.7407	.5099	.3352	.1929		.1826		.1767	-.2029	-.2358	-.2464	-.1114	
120.000			.6290	.4402	.2805	.2354		.5374		.1229	-.1645	-.3696	-.3353	-.1842	
140.000										.0615					
150.000			.4918	.3408	.2642	.2319				-.1787	-.4382	-.3771	-.2610	-.1977	
151.000									.6336						
156.000								.8903							
162.000									.6534						
165.000										-.3000	-.3938	-.3176	-.2467	-.2150	
169.000								.9074							
174.000						1.0213									
180.000	1.4216	.6367	.3846	.3315	.2586	.2210		.8135		-.3910	-.4174	-.2838	-.2576	-.2268	
305.000			.3915	.1154	.1195	.1616		-.1585		-.2473					
320.000			.4235	.0386	.1020	.2913		-.3666		-.2690	-.2033	-.2139	-.0485	.0062	.0876
340.000			.4492	.0157	.0272	.5446		-.2465		-.2231					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1854	.3878	.5988	.3075	-.2521	-.3079	-.2478		-.1779	-.1892					
40.000	.1192	.2169	.3447	-.1256	-.3023	-.2725	-.3530		-.1426	-.1746					
70.000	-.0764	-.1919	-.2458	-.1467	-.0959	-.1040	-.2105								
90.000	-.0452	-.1566	-.2139	-.0011	-.1030	-.1368	-.1664								
105.000			-.1563	.0578	-.1247	-.2059	-.2195								
110.000															
120.000	-.1903	-.2061	.1585	.0931	-.0182	-.1838	-.2441								
135.000			.2022	.1693	-.0371	-.1714	-.1155								
150.000	-.1365	-.0528	.1994	.1795	-.1297	.0193	-.0413								
165.000	-.1123		.1767		.2805	.1466	-.2242								
180.000	-.0882	.0693	.1640	.2028											
320.000	.1687	.4622	.6161	.4609	-.2382	-.1888	-.2286								

ORIGINAL PAGE IS  
OF POOR QUALITY

ARC11-019 1A81 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB14)

ALPHA0( 6) = 4.218 BETA0 ( 3) = .008

## SECTION ( 1) ORBITER FUSELAGE

## DEPENDENT VARIABLE CP

X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.4325	1.0550	.4261	.0789	.1362	.9003		-.2235		-.3199	-.0757	-.2245	.0753	.0031	.1014
20.000			.4618	.1148	.1309	.5934		-.3698		-.2513					
40.000			.5914	.2229	.1278	.3647		-.2212		-.4077	-.2267	-.1443	-.0031	-.0740	-.0874
55.000			.6278	.3447	.2471	.1692		-.0135		-.1196					
70.000			.6170	.3602	.2446	.1313		.0458		-.0029	-.3075	-.2817	-.1389	-.1298	
90.000		.7444	.6085	.3800	.2406	.1351		.1079		.0616	-.2854	-.3201	-.3164	-.1038	
120.000			.5544	.3803	.2427	.2023		.4413		.0154	-.2547	-.4280	-.3192	-.1425	
140.000										-.0753					
150.000			.4748	.3521	.2706	.2217			.5521	-.2711	-.4427	-.3403	-.2498	-.1848	
151.000															
156.000								.8256							
162.000								.5912							
165.000										-.2941	-.4244	-.2994	-.2532	-.2084	
169.000								.8852							
174.000							1.0008								
180.000	1.4365	.6116	.4185	.3633	.2931	.2399		.8504		-.4368	-.4231	-.2526	-.2519	-.2118	
305.000			.5971	.3351	.2796	.2202		-.0653		-.1335					
320.000			.5640	.2022	.1964	.3729		-.2531		-.3395	-.1189	-.2485	.0072	.0815	.0877
340.000			.5045	.0922	.1732	.6303		-.4502		-.2267					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.2028	.3287	.4366	.2984	-.1383	-.2284	-.2163		-.1843	-.1785					
40.000	.1612	.2822	.3585	.0705	-.2818	-.2610	-.2788		-.1782	-.1874					
70.000	-.0940	-.2099	-.2355	-.0725	-.0711	-.1217	-.2284								
90.000	-.0499	-.1650	-.1735	.0178	-.1257	-.1502	-.1930								
105.000			.0023	.0807	-.1850	-.2474	-.2272								
110.000								-.2925							
120.000	-.1014	-.0821	.1613	.1005	-.0785	-.2229	-.2707	-.2521							
135.000			.1830	.2076	-.0587	-.1305	-.1551								
150.000	-.0645	.0525	.1725	.2141	.0329	-.0326	-.1131								
165.000	-.0595		.1883		.1846	.0367	-.2278								
180.000	-.0580	.0494	.1973	.2898											
320.000	.1771	.3384	.4366	.1539	-.2607	-.2232	-.2567								

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IABIA - PRESSURE SOURCE DATA TABULATION

PAGE 245

ARC11-019 IAB1 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB14)

ALPHA0( 6) = 4.217 BETA0( 4) = 4.126

SECTION ( 1) ORBITER FUSELAGE		DEPENDENT VARIABLE CP													
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.4184	1.0327	.4245	.0692	.1014	.9629		-.2469		-.2774	-.2124	-.1757	.1043	-.0221	.0445
20.000			.3930	.0646	.0955	.5297		-.3241		-.4095					
40.000			.4151	.1175	.1017	.3025		-.3173		-.3826	-.1142	-.1751	-.0017	-.0373	.0553
55.000			.4204	.1754	.1237	.1362		-.0949		-.2112					
70.000			.4299	.1962	.1247	.0912		-.0079		-.0677	-.3786	-.3795	-.2519	-.1317	
90.000		.4829	.4538	.2343	.1324	.0828		.1065		-.0191	-.3571	-.3953	-.3603	-.1147	
120.000			.4507	.2947	.1747	.1409		.3657		-.0741	-.3379	-.4913	-.3361	-.1348	
140.000										-.2307					
150.000			.4188	.3244	.2362	.1841				-.3267	-.4448	-.3256	-.2823	-.2400	
151.000									.4542						
156.000								.7298							
162.000									.5207						
165.000										-.2994	-.4429	-.2668	-.2686	-.2418	
169.000								.8548							
174.000							.8629								
180.000	1.4184	.5491	.4094	.3514	.2759	.2222		.8465		-.4006	-.4097	-.2943	-.2572	-.2288	
305.000			.7873	.4994	.3822	.2653		.0508		-.0343					
320.000			.6797	.2826	.1916	.3778		-.1196		-.2441	-.0359	-.2881	-.0484	.1442	-.1005
340.000			.5518	.1058	.0965	.6632		-.4553		-.1872					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1669	.3106	.4427	.3033	-.2021	-.2353	-.2278		-.1781	-.1845					
40.000	.1650	.3559	.5577	.4154	-.3527	-.1878	-.2228		-.1888	-.2007					
70.000	-.0801	-.1892	-.2083	-.0437	-.0583	-.1348	-.2443								
90.000	-.0420	-.1334	-.1042	.0297	-.1280	-.1596	-.2039								
105.000			.0257	.0780	-.2204	-.2408	-.2393								
110.000								-.2875							
120.000	-.0528	-.0236	.1583	.1200	-.1190	-.2570	-.3396	-.2555							
135.000			.1828	.1649	-.0710	-.1641	-.2061								
150.000	-.0646	.0511	.1800	.1733	-.0040	-.1088	-.1828								
165.000	-.0816		.1710		.1063	-.0461	-.2430								
180.000	-.1005	.0560	.1657	.1999											
320.000	.1678	.2859	.3107	-.0989	-.2343	-.2427	-.3356								

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## IABIA - PRESSURE SOURCE DATA TABULATION

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ARC11-019 IAB1 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB14)

ALPHA( 6) = 4.218 BETA( 5) = 6.196

SECTION ( 1) ORBITER FUSELAGE

DEPENDENT VARIABLE CP

X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.3758	1.0076	.4183	.0935	.0960	.9623		-.2211		-.2592	-.3144	-.2927	.0812	-.0211	.0228
20.000			.3520	.0496	.1043	.4900		-.2951		-.4224					
40.000			.3151	.0728	.1043	.2569		-.3820		-.3740	-.1105	-.2214	-.0820	-.1007	.0433
55.000			.3126	.1007	.0765	.1190		-.1465		-.2437					
70.000			.3378	.1214	.0650	.0710		-.0435		-.1109	-.4091	-.4144	-.2877	-.1270	
90.000		.3613	.3760	.1665	.0694	.0610		.1032		-.0641	-.3905	-.4354	-.3685	-.1226	
120.000			.3902	.2448	.1177	.0945		.3170		-.1105	-.3644	-.5293	-.3645	-.1527	
140.000										-.2915					
150.000			.3710	.2939	.1947	.1380				-.3507	-.4485	-.2979	-.3044	-.2844	
151.000									.3864						
156.000								.7128							
162.000									.4649						
165.000										-.3312	-.4461	-.2772	-.2812	-.2680	
169.000							.9009	.8059							
174.000															
180.000	1.3758	.5102	.3829	.3251	.2478	.1896		.7907		-.3979	-.3942	-.3230	-.2645	-.2562	
305.000			.8857	.6009	.4368	.2862		.0933		.0124					
320.000			.7448	.3727	.2272	.4076		-.0743		-.2103	.0018	-.2725	-.0523	.0433	-.0758
340.000			.5766	.1612	.0777	.6963		-.4559		-.1521					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1387	.2974	.4318	.2696	-.2185	-.2467	-.2324		-.1694	-.1728					
40.000	.1139	.4019	.6062	.5008	-.3550	-.1773	-.2231		-.1941	-.1996					
70.000	-.0659	-.1738	-.1935	-.0591	-.0423	-.1352	-.2529								
90.000	-.0340	-.1152	-.1111	.0354	-.1250	-.1749	-.2162								
105.000			-.0296	.1138	-.2172	-.2424	-.2448								
110.000								-.2690							
120.000	-.0585	-.0138	.0925	.1237	-.1321	-.2647	-.3600	-.2551							
135.000			.1119	.1348	-.0262	-.1740	-.2371								
150.000	-.0848	.0643	.1129	.1209	.0122	-.1498	-.2166								
165.000	-.1081		.1036		.0264	-.1026	-.2476								
180.000	-.1558	.0475	.1082	.1859											
320.000	.1551	.2812	.3174	-.1296	-.2393	-.2448	-.3448								

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## IABIA - PRESSURE SOURCE DATA TABULATION

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ARC11-019 IAB1 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB14)

ALPHA0 ( 7 ) = 6.327 BETA0 ( 1 ) = -4.066

SECTION ( 1 )ORBITER FUSELAGE			DEPENDENT VARIABLE CP												
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.3994	1.0383	.3794	.0153	.0381	.9041		-.1635		-.2851	-.0671	-.2552	.0061	.0890	.0871
20.000			.5024	.1324	.0136	.6515		-.3780		-.2083					
40.000			.7224	.3219	.1734	.4143		-.0862		-.2343	-.2025	-.1752	.0098	.0122	-.0157
55.000			.7919	.4928	.3467	.1952		.0944		-.0333					
70.000			.7632	.4950	.3347	.1446		.1304		.0549	-.2418	-.1768	-.1458	-.1056	
90.000		.8992	.7195	.4832	.3121	.1646		.1536		.1788	-.2147	-.2363	-.2441	-.1174	
120.000			.5966	.3999	.2374	.1893		.4937		.1231	-.1824	-.3839	-.3719	-.2358	
140.000										.0549					
150.000			.4518	.2878	.2170	.1859				-.1804	-.4687	-.4121	-.2925	-.2165	
151.000									.6406						
156.000								.8865							
162.000									.6564						
165.000										-.3422	-.4270	-.3504	-.2714	-.2308	
169.000								.9060							
174.000						.9813									
180.000	1.3994	.5900	.3355	.2867	.2130	.1771		.8153		-.4319	-.4472	-.3132	-.2773	-.2382	
305.000			.3611	.0947	.1054	.1321		-.1670		-.2622					
320.000			.3795	-.0031	.0892	.2656		-.3641		-.1726	-.2200	-.1687	-.0201	.0355	.0883
340.000			.4033	-.0393	.0048	.5072		-.2743		-.1741					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.2032	.3734	.6055	.3225	-.3149	-.3330	-.2326		-.1977	-.1959					
40.000	.1367	.2247	.3513	-.0815	-.3248	-.2722	-.3191		-.1864	-.1944					
70.000	-.1060	-.2076	-.2717	-.1843	-.1347	-.1320	-.2351								
90.000	-.0686	-.1676	-.2409	-.0260	-.1310	-.1767	-.2012								
105.000			-.1441	.0352	-.1443	-.2250	-.2696								
110.000								-.3067							
120.000	-.2595	-.2487	.1281	.0722	-.0402	-.2078	-.2679	-.2623							
135.000			.1521	.1395	-.0567	-.2093	-.1445								
150.000	-.1316	.0064	.1537	.1575	-.1512	-.0144	-.0845								
165.000	-.0971		.1525		.2063	.1330	-.2126								
180.000	-.0760	.0583	.1453	.1879											
320.000	.1899	.4270	.6009	.4097	-.2204	-.2006	-.2287								

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OF POOR QUALITY

ARC11-019 IAB1 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB14)

ALPHAO ( 7 ) = 6.327 BETAO ( 2 ) = -2.028

## SECTION ( 1 ) ORBITER FUSELAGE

## DEPENDENT VARIABLE CP

X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.4173	1.0391	.3149	-.0319	.0502	.8153		-.2487		-.1362	-.0720	-.2601	.0243	.1078	.1612
20.000			.4220	.0534	.0465	.5946		-.4618		-.1984					
40.000			.6275	.2387	.1320	.2943		-.1343		-.2913	-.2635	-.0658	.1110	-.0031	.0163
55.000			.6954	.4092	.2923	.1477		.0527		-.0794					
70.000			.6761	.4210	.2833	.1023		.0865		.0147	-.2707	-.2471	-.1443	-.1363	
90.000		.8049	.6489	.4194	.2656	.1298		.1055		.1291	-.2499	-.2906	-.2676	-.1350	
120.000			.5611	.3748	.2245	.1799		.4736		.0728	-.2234	-.4160	-.3766	-.1922	
140.000										-.0022					
150.000			.4464	.3019	.2266	.1940				-.2321	-.4691	-.3943	-.2769	-.1825	
151.000									.6006						
156.000								.8611							
162.000									.6345						
165.000										-.3317	-.4563	-.3452	-.2701	-.1968	
169.000								.9142							
174.000						1.0112									
180.000	1.4173	.5900	.3576	.3053	.2379	.1918		.8561		-.4628	-.4529	-.2909	-.2788	-.2086	
305.000			.4407	.1934	.2047	.1405		-.1089		-.2019					
320.000			.4110	.0418	.1878	.2698		-.2903		-.2433	-.1658	-.1611	-.0304	.0861	.1416
340.000			.3822	-.0446	.1524	.5225		-.4317		-.1013					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.2288	.3544	.5298	.3064	-.2194	-.2337	-.2265		-.1773	-.1984					
40.000	.1795	.2759	.3663	-.0624	-.2672	-.2653	-.2924		-.1788	-.1895					
70.000	-.1099	-.2182	-.2628	-.1400	-.1318	-.1359	-.2355								
90.000	-.0746	-.1754	-.2184	-.0078	-.1464	-.1887	-.2054								
105.000			-.0928	.0666	-.1765	-.2554	-.2766								
110.000								-.3108							
120.000	-.1854	-.1471	.1476	.0965	-.0624	-.2240	-.2763	-.2729							
135.000			.1752	.1738	-.0642	-.1759	-.1591								
150.000	-.0824	.0232	.1674	.2151	-.0754	-.0307	-.1116								
165.000	-.0675		.1587		.1784	.0722	-.2294								
180.000	-.0604	.0378	.1659	.2545											
320.000	.1937	.3663	.4962	.2629	-.2722	-.1945	-.2154								

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## IAB1A - PRESSURE SOURCE DATA TABULATION

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ARC11-019 IAB1 LVAP (ELHL SEALED) ORB. FUSELAGE

(RETB14)

ALPHA0 ( 7 ) = 6.325 BETA0 ( 3 ) = .021

SECTION ( 1 ) ORBITER FUSELAGE

DEPENDENT VARIABLE CP

X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.4298	1.0540	.3889	.0416	.1322	.8485		-.2412		-.2232	-.0480	-.2391	.0669	.0455	.1280
20.000			.4205	.0726	.1331	.5571		-.3920		-.2124					
40.000			.5662	.1957	.1300	.3056		-.2056		-.3883	-.2727	-.0697	.0688	.0617	.0771
55.000			.6138	.3377	.2515	.1469		-.0037		-.1427					
70.000			.6034	.3479	.2410	.1061		.0465		-.0300	-.3016	-.2951	-.1651	-.1393	
90.000		.7219	.5921	.3609	.2252	.1143		.0836		.0812	-.2870	-.3245	-.2780	-.1188	
120.000			.5277	.3485	.2057	.1652		.4376		.0313	-.2631	-.4321	-.3543	-.1604	
140.000										-.0666					
150.000			.4413	.3110	.2264	.1869			.5603	-.2814	-.4652	-.3655	-.2677	-.1677	
151.000															
156.000								.8392							
162.000									.5977						
165.000										-.3178	-.4471	-.3208	-.2708	-.1975	
169.000								.8993							
174.000						.9803									
180.000	1.4298	.5872	.3776	.3213	.2500	.1913		.8596		-.4583	-.4459	-.2740	-.2714	-.2087	
305.000			.5946	.3253	.2663	.1932		-.0502		-.1487					
320.000			.5649	.1796	.1714	.3384		-.2208		-.3225	-.1107	-.2163	.0338	.0899	.1513
340.000			.4794	.0550	.1560	.5978		-.4682		-.2162					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.2345	.3618	.4731	.3206	-.2313	-.2387	-.2288		-.1945	-.2045					
40.000	.1988	.3019	.3881	.0677	-.3119	-.2427	-.2443		-.1862	-.1881					
70.000	-.0985	-.2282	-.2573	-.1036	-.1119	-.1425	-.2409								
90.000	-.0578	-.1754	-.2014	-.0084	-.1578	-.1788	-.2045								
105.000			-.0103	.0568	-.1990	-.2719	-.2459								
110.000								-.3099							
120.000	-.1143	-.0972	.1548	.0779	-.0690	-.2322	-.2860	-.2732							
135.000			.1756	.1927	-.0492	-.1532	-.1729								
150.000	-.0597	.0356	.1629	.2206	-.0011	-.0531	-.1252								
165.000	-.0513		.1744		.1922	.0290	-.2359								
180.000	-.0479	.0276	.1834	.3537											
320.000	.2144	.3524	.4416	.1592	-.2148	-.2306	-.2536								



ARC11-019 IAB1 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB14)

ALPHA0 ( 7 ) = 6.323 BETA0 ( 4 ) = 2.091

## SECTION ( 1 ) ORBITER FUSELAGE

## DEPENDENT VARIABLE CP

X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.4079	1.0538	.4152	.0466	.1010	.8787		-.3348		-.2609	-.1315	-.2518	.0539	.0379	.1001
20.000			.4120	.0721	.1187	.5374		-.4220		-.2919					
40.000			.4889	.1514	.1190	.3177		-.2705		-.4450	-.1822	-.1527	.0419	.0403	.0762
55.000			.5145	.2502	.1890	.1253		-.0561		-.1822					
70.000			.5091	.2623	.1793	.0845		.0049		-.0629	-.3463	-.3410	-.1994	-.1304	
90.000		.5971	.5120	.2860	.1697	.0867		.0567		.0399	-.3264	-.3627	-.3117	-.1097	
120.000			.4731	.3053	.1773	.1441		.4043		-.0212	-.3065	-.4617	-.3417	-.1341	
140.000										-.1486					
150.000			.4139	.2993	.2183	.1710				-.3221	-.4672	-.3590	-.2706	-.1787	
151.000									.5093						
156.000								.8071							
162.000									.5447						
165.000										-.3174	-.4495	-.2873	-.2743	-.2144	
169.000								.8709							
174.000							.9645								
180.000	1.4079	.5496	.3738	.3155	.2434	.1845		.8514		-.4566	-.4380	-.2798	-.2684	-.2218	
305.000			.6932	.3954	.3186	.2155		.0024		-.1017					
320.000			.6300	.2185	.1591	.3340		-.1763		-.2621	-.0700	-.2724	.0323	.0383	.1281
340.000			.5281	.0737	.1074	.6192		-.4710		-.1949					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.2060	.3308	.4392	.3144	-.1873	-.2193	-.2143		-.1773	-.1776					
40.000	.1697	.3013	.4392	.2263	-.3128	-.2137	-.2264		-.1755	-.1910					
70.000	-.1017	-.2178	-.2469	-.0802	-.1020	-.1467	-.2538								
90.000	-.0567	-.1625	-.1804	-.0013	-.1659	-.1746	-.2130								
105.000			-.0032	.0642	-.2255	-.2827	-.2519								
110.000								-.3058							
120.000	-.0694	-.0637	.1502	.0874	-.1035	-.2522	-.3160	-.2566							
135.000			.1788	.2445	-.0628	-.1620	-.1971								
150.000	-.0548	.0182	.1871	.2451	-.0042	-.1049	-.1570								
165.000	-.0601		.1784		.1545	-.0313	-.2413								
180.000	-.0685	.0617	.1586	.2181											
320.000	.1995	.3303	.3750	.0207	-.2640	-.2476	-.2992								

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## IABIA - PRESSURE SOURCE DATA TABULATION

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ARC11-019 IAB1 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB14)

ALPHA0 ( 7 ) = 6.316 BETA0 ( 5 ) = 4.148

SECTION ( 1 ) ORBITER FUSELAGE

DEPENDENT VARIABLE CP

X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.3944	1.0427	.4077	.0272	.0588	.9195		-.2353		-.2876	-.1972	-.1096	.0101	-.0044	.1065
20.000			.3745	.0284	.0557	.5053		-.3518		-.3229					
40.000			.3944	.0913	.0857	.2764		-.3245		-.3937	-.1466	-.1593	.0315	-.0330	.0985
55.000			.3979	.1646	.1189	.1060		-.1068		-.2336					
70.000			.4058	.1829	.1124	.0701		-.0267		-.1052	-.3755	-.3647	-.2349	-.1387	
90.000		.4612	.4282	.2179	.1139	.0591		.0328		-.0155	-.3588	-.4023	-.3307	-.1241	
120.000			.4212	.2708	.1448	.1139		.3570		-.0661	-.3463	-.4997	-.3468	-.1288	
140.000										-.2215					
150.000			.3796	.2894	.2034	.1443				-.3398	-.4650	-.3474	-.2996	-.1985	
151.000									.4479						
156.000								.7134							
162.000									.5180						
165.000										-.3218	-.4585	-.2866	-.2906	-.2372	
169.000								.8601							
174.000							.8025								
180.000	1.3944	.5180	.3619	.3090	.2391	.1765		.8492		-.4284	-.4308	-.3156	-.2786	-.2310	
305.000			.7865	.4888	.3772	.2692		.0337		-.0515					
320.000			.6770	.2622	.1718	.3842		-.1129		-.2510	-.0459	-.2656	-.0559	.1766	-.0482
340.000			.5374	.0647	.0493	.6372		-.4669		-.2100					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1840	.3149	.4488	.3026	-.1927	-.2321	-.2205		-.1722	-.1832					
40.000	.2048	.3487	.5350	.3667	-.3414	-.1814	-.2143		-.1856	-.1987					
70.000	-.0792	-.2025	-.2316	-.0691	-.0951	-.1550	-.2593								
90.000	-.0373	-.1448	-.1640	.0081	-.1600	-.1842	-.2158								
105.000			-.0177	.0664	-.2498	-.2911	-.2515								
110.000								-.3055							
120.000	-.0382	-.0341	.1295	.1148	-.1258	-.2612	-.3406	-.2552							
135.000			.1835	.1844	-.1035	-.1786	-.2279								
150.000	-.0543	.0390	.1677	.1201	-.0482	-.1252	-.1869								
165.000	-.0720		.1445		.1121	-.0469	-.2496								
180.000	-.0853	.0784	.1448	.1859											
320.000	.1856	.2954	.3181	-.0923	-.2302	-.2400	-.3142								

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## IA81A - PRESSURE SOURCE DATA TABULATION

PAGE 252

ARC11-019 IA81 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB15) ( 02 OCT 74 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 976.0000 IN. XT  
 LREF = 1297.0000 INCHES YMRP = .0000 IN. YT  
 BREF = 1297.0000 INCHES ZMRP = 400.0000 IN. ZT  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

MACH = .900 RN/FT = 2.250  
 ELV-1B = 8.000 ELV-0B = 6.000  
 RUDDER = .000 SPOBRK = .000

ALPHA( 1 ) = -6.170 BETA( 1 ) = -4.069

SECTION ( 1 ) ORBITER FUSELAGE				DEPENDENT VARIABLE CP											
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.9740
PHI															
.000	1.1999	.5575	.1596	.1125	.1082	.7662		-.5302		-.2903	-.2556	-.1347	-.0518	.0394	.0863
20.000			.2058	.1292	.1028	.3036		-.5366		-.2925					
40.000			.3641	.1604	.1005	.0603		-.6798		-.3705	-.4242	-.1037	-.0287	.0589	.1049
55.000			.4772	.2583	.1578	.0361		-.2915		-.2706					
70.000			.5293	.2933	.1730	.0721		-.1740		-.2709	-.7869	-.0604	.0395	.0961	
90.000		.7593	.5694	.3318	.1944	.1149		-.1067		-.3043	-.7244	-.1063	.0297	.0813	
120.000			.6013	.4201	.2902	.2824		.1675		-.2851	-.6474	-.2047	.0153	.0574	
140.000										-.2144					
150.000			.5628	.4152	.3391	.3576				-.4311	-.9283	-.1449	.0066	.0345	
151.000									.3020						
156.000								.6360							
162.000									.3569						
165.000										-.8872	-.8302	-.0908	-.0048	.0257	
169.000								.6919							
174.000						.8534									
180.000	1.1999	.7329	.4722	.3772	.3248	.3484		.6009		-.9541	-.8014	-.0525	-.0181	.0177	
305.000			.1666	.0479	.0126	-.1282		-.6292		-.3940					
320.000			.1589	.0528	.0588	-.0765		-.5830		-.3424	-.3248	-.1400	-.0583	.0086	.0497
340.000			.1890	.0784	.1027	.1666		-.5583		-.3172					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1046	.2129	.4395	.0167	-.3251	-.2972	-.2852		-.2443	-.2470					
40.000	.0109	.0430	.1222	-.2998	-.4400	-.2629	-.2574		-.2351	-.2260					
70.000	-.0150	-.0731	.0338	.1325	-.1732	-.3643	-.1822								
90.000	.0159	-.0151	.1051	.1688	-.2151	-.3388	-.2154								
105.000			.1714	.2185	-.3213	-.3613	-.2864								
110.000								-.2721							
120.000	.0437	.0769	.2725	.3243	-.3456	-.3398	-.3964	-.2560							
135.000			.3400	.4217	-.2216	-.1917	-.2725								
150.000	.0521	.1249	.3408	.4389	-.1148	-.1299	-.2399								
165.000	.0498		.3190		.0881	-.0840	-.2384								
180.000	.0437	.1192	.2953	.4944											
320.000	.0582	.2191	.3469	.0251	-.2972	-.2642	-.2399								

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## 1A81A - PRESSURE SOURCE DATA TABULATION

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ARC11-019 1A81 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB15)

ALPHA0( 1) = -6.165 BETA0 ( 2) = -2.034

SECTION ( 1) ORBITER FUSELAGE		DEPENDENT VARIABLE CP													
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.2204	.5706	.1757	.1246	.1206	.7251		-.6016		-.2852	-.2600	-.1357	-.0407	.0458	.0739
20.000			.2048	.1314	.1105	.2891		-.6223		-.3024					
40.000			.3307	.1408	.0901	.0453		-.7621		-.3155	-.4061	-.1032	-.0198	.0529	.0875
55.000			.4183	.2030	.1150	.0057		-.3511		-.4233					
70.000			.4628	.2279	.1173	.0379		-.2289		-.4383	-.7823	-.1316	.0451	.0903	
90.000		.6766	.5062	.2701	.1334	.0706		-.1679		-.4155	-.8038	-.1779	.0436	.0798	
120.000			.5557	.3730	.2488	.2462		.1101		-.4038	-.6999	-.3042	.0409	.0581	
140.000										-.4133					
150.000			.5484	.4077	.3313	.3305				-.7452	-.8923	-.2278	.0390	.0460	
151.000									.2638						
156.000								.6043							
162.000									.3323						
165.000										-.8751	-.7955	-.1476	.0308	.0422	
169.000								.6882							
174.000							.8539								
180.000	1.2204	.7397	.4920	.3989	.3424	.3389		.6376		-.9458	-.8715	-.1356	.0210	.0380	
305.000			.2490	.1052	.0609	-.0780		-.5687		-.4189					
320.000			.2060	.0905	.0905	-.0115		-.9181		-.3266	-.3588	-.1337	-.0302	.0248	.0558
340.000			.2128	.1052	.1225	.2283		-.5981		-.3020					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.0811	.1644	.3403	-.0411	-.3237	-.2914	-.2873		-.2362	-.2389					
40.000	.0112	.0395	.0566	-.4113	-.3728	-.2590	-.2526		-.2317	-.2355					
70.000	-.0058	-.0613	.0279	.1149	-.2110	-.4078	-.2330								
90.000	.0289	-.0081	.0970	.1435	-.2612	-.3878	-.3394								
105.000			.1581	.1903	-.3746	-.4134	-.4330								
110.000								-.2505							
120.000	.0553	.0830	.2411	.2648	-.4161	-.4062	-.4412	-.2531							
135.000			.3237	.4352	-.2805	-.2450	-.3172								
150.000	.0670	.1328	.3354	.5231	-.1600	-.1809	-.2731								
165.000	.0681		.3294		.0272	-.1409	-.2411								
180.000	.0647	.1385	.3226	.5585											
320.000	.0383	.1766	.2871	-.0346	-.2865	-.2466	-.2362								

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## TAB1A - PRESSURE SOURCE DATA TABULATION

PAGE 254

ARC11-019 1A81 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB15)

ALPHA0 ( 1 ) = -6.129 BETA0 ( 3 ) = .031

SECTION ( 1 ) ORBITER FUSELAGE				DEPENDENT VARIABLE CP											
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PH1															
.000	1.2194	.5656	.1662	.1227	.1126	.6402		-.5346		-.2844	-.2460	-.1415	-.0373	.0385	.0656
20.000			.1794	.1155	.0948	.2405		-.5617		-.2938					
40.000			.2734	.1072	.0610	.0211		-.8375		-.3149	-.3926	-.0992	-.0196	.0449	.0766
55.000			.3392	.1425	.0591	-.0432		-.4159		-.4971					
70.000			.3794	.1542	.0496	-.0199		-.2908		-.5239	-.8419	-.1274	.0407	.0774	
90.000		.5791	.4254	.1936	.0618	.0062		-.2336		-.5077	-.8953	-.2486	.0449	.0661	
120.000			.4916	.3112	.1846	.1863		.0396		-.5102	-.7912	-.3821	.0230	.0430	
140.000										-.5715					
150.000			.5133	.3821	.3017	.3136				-.8406	-.9261	-.1509	.0253	.0386	
151.000									.1973						
156.000								.5520							
162.000									.2746						
165.000										-.8741	-.8305	-.1011	.0249	.0390	
169.000								.6665							
174.000							.8180								
180.000	1.2194	.7330	.4951	.4007	.3412	.3672		.6533		-.9639	-.9623	-.0996	.0238	.0417	
305.000			.3121	.1510	.0961	-.0521		-.4992		-.2853					
320.000			.2380	.1062	.1026	.0054		-.7988		-.2553	-.3854	-.1196	-.0268	.0345	.0583
340.000			.2205	.1058	.1252	.2523		-.6084		-.2658					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PH1															
.000	.0728	.1083	.1873	-.0859	-.2997	-.3148	-.2596		-.2416	-.2325					
40.000	.0120	.0463	.0544	-.2589	-.2974	-.2890	-.2637		-.2306	-.2367					
70.000	-.0047	-.0624	.0092	.0773	-.2526	-.4666	-.2542								
90.000	.0212	-.0115	.0749	.1035	-.3129	-.4461	-.3329								
105.000			.1380	.1180	-.4418	-.4583	-.4673								
110.000								-.2534							
120.000	.0463	.0665	.2060	.1811	-.5141	-.4597	-.5576	-.2804							
135.000			.2959	.4215	-.3683	-.2956	-.4062								
150.000	.0615	.1235	.3207	.5250	-.2294	-.2520	-.3176								
165.000	.0626		.3237		-.0328	-.2121	-.2275								
180.000	.0649	.1399	.3264	.5762											
320.000	.0231	.0965	.1396	-.1776	-.3110	-.2683	-.2378								

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## IA81A - PRESSURE SOURCE DATA TABULATION

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ARC11-019 IA81 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB15)

ALPHA( 1) = -6.118 BETA( 4) = 2.093

SECTION ( 1) ORBITER FUSELAGE	DEPENDENT VARIABLE CP														
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.2140	.5588	.1585	.1160	.1022	.7743		-.5617		-.2765	-.2425	-.1511	-.0489	.0245	.0575
20.000			.1561	.0979	.0757	.1932		-.5962		-.2945					
40.000			.2157	.0775	.0356	-.0138		-.8851		-.3313	-.3583	-.1184	-.0256	.0350	.0651
55.000			.2691	.0854	.0102	-.0807		-.4609		-.5312					
70.000			.3023	.0896	-.0049	-.0647		-.3388		-.5781	-.6944	-.2777	.0421	.0795	
90.000		.4769	.3495	.1251	-.0019	-.0436		-.2785		-.5695	-.5499	-.4549	.0459	.0674	
120.000			.4280	.2509	.1202	.1281		-.0226		-.5960	-.8574	-.4245	-.0245	.0354	
140.000										-.7821					
150.000			.4748	.3568	.2677	.2802				-.885R	-.9240	-.1197	-.0019	.0288	
151.000									.1443						
156.000								.5076							
162.000									.2344						
165.000										-.8691	-.8745	-.0884	.0083	.0329	
169.000							.8054	.6481							
174.000															
180.000	1.2140	.7156	.4926	.3999	.3356	.3567		.6545		-.9553	-.8688	-.0775	.0139	.0382	
305.000			.3847	.2074	.1378	-.0184		-.4190		-.2266					
320.000			.2710	.1271	.1137	.0393		-.6448		-.2456	-.4134	-.1125	-.0162	.0420	.0931
340.000			.2294	.1116	.1206	.2760		-.5691		-.2486					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.0674	.1137	.2026	-.0494	-.2862	-.2849	-.2973		-.2638	-.2468					
40.000	.0238	.1111	.2131	-.0675	-.2744	-.2785	-.2677		-.2741	-.2729					
70.000	.0015	-.0572	-.0058	.0570	-.2835	-.4920	-.2806								
90.000	.0250	-.0087	.0603	.0760	-.3482	-.4913	-.3715								
105.000			.1163	.0820	-.4794	-.5030	-.4833								
110.000								-.2467							
120.000	.0413	.0558	.1730	.0947	-.5928	-.5428	-.6264	-.2866							
135.000			.2706	.3599	-.4413	-.4045	-.4535								
150.000	.0580	.1148	.3028	.5286	-.2895	-.3397	-.3465								
165.000	.0584		.3107		-.0820	-.2791	-.2266								
180.000	.0614	.1379	.3228	.5785											
320.000	.0216	.0611	.0495	-.3425	-.3213	-.2829	-.2782								

ARC11-019 IAB1 LVAP(ELHL SEALED) ORB. FUSELAGE

(RET815)

ALPHA( 1) = -6.110 BETA( 5) = 4.138

SECTION ( 1) ORBITER FUSELAGE

DEPENDENT VARIABLE CP

X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.1929	.5363	.1435	.1000	.0853	.7655		-.5028		-.3170	-.2687	-.1986	-.0756	-.0023	.0374
20.000			.1219	.0638	.0460	.1331		-.5946		-.3383					
40.000			.1559	.0313	.0003	-.0721		-.9182		-.3814	-.3316	-.1504	-.0538	.0195	.0491
55.000			.1929	.0222	-.0398	-.1179		-.5127		-.5781					
70.000			.2222	.0207	-.0639	-.1030		-.3847		-.6312	-.4674	-.3828	-.0016	.0830	
90.000		.3656	.2715	.0468	-.0662	-.0973		-.3290		-.6297	-.4985	-.5106	-.0403	.0649	
120.000			.3579	.1801	.0523	.0763		-.0929		-.6763	-.7168	-.4445	-.0872	.0270	
140.000										-.8844					
150.000			.4307	.3229	.2316	.2487			.0788	-.9178	-.9068	-.1210	-.0414	.0105	
151.000															
156.000								.4566							
162.000									.1843						
165.000										-.8662	-.9185	-.0808	-.0271	.0162	
169.000								.6141							
174.000							.7768								
180.000	1.1929	.6969	.4889	.3928	.3296	.3548		.6366		-.9413	-.8059	-.0899	-.0106	.0230	
305.000			.4558	.2617	.1858	.0236		-.3365		-.2338					
320.000			.2953	.1416	.1190	.0599		-.5965		-.2691	-.6990	-.0977	-.0087	.0457	.1149
340.000			.2273	.1072	.1114	.3052		-.5445		-.2683					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.0574	.1418	.2797	.0272	-.2993	-.3054	-.3048		-.2616	-.2355					
40.000	.0438	.1490	.3031	.0087	-.2910	-.2888	-.2851		-.2827	-.2774					
70.000	.0056	-.0523	-.0246	.0321	-.3224	-.5267	-.3101								
90.000	.0215	-.0152	.0306	.0469	-.3801	-.5301	-.3828								
105.000			.0892	.0503	-.5153	-.5403	-.4801								
110.000								-.2507							
120.000	.0355	.0446	.1353	.0307	-.6630	-.6228	-.6906	-.2885							
135.000			.2354	.3309	-.4931	-.4888	-.5070								
150.000	.0438	.1009	.2736	.5247	-.3485	-.4369	-.4093								
165.000	.0445		.2876		-.1226	-.3555	-.2336								
180.000	.0483	.1266	.3107	.5519											
320.000	.0154	.0699	.0786	-.4341	-.3522	-.2935	-.2900								

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## 1A81A - PRESSURE SOURCE DATA TABULATION

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ARC11-019 1A81 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB15)

ALPHA0( 2) = -4.082 BETA0 ( 1) = -6.131

SECTION ( 1) ORBITER FUSELAGE				DEPENDENT VARIABLE CP											
X/LB	.0000	.0080	.0230	.0450	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.1827	.5742	.1522	.0978	.0859	.7772		-.5203		-.3167	-.2974	-.1697	-.0744	.0437	.1097
20.000			.2200	.1352	.0981	.3373		-.4935		-.2994					
40.000			.4190	.1934	.1250	.0943		-.5897		-.3931	-.4020	-.1156	-.0268	.0788	.1362
55.000			.5479	.3200	.2125	.0962		-.1981		-.2350					
70.000			.5975	.3586	.2273	.1226		-.0915		-.2117	-.6975	-.0863	.0318	.0837	
90.000		.8260	.6226	.3919	.2459	.1656		-.0275		-.1910	-.6723	-.1608	.0280	.0750	
120.000			.6118	.4289	.3090	.3033		.2312		-.2178	-.5969	-.5680	-.0110	.0237	
140.000										-.1935					
150.000			.5266	.3711	.3056	.2979				-.2887	-1.0054	-.3162	-.0140	-.0015	
151.000									.3372						
156.000								.6606							
162.000									.3699						
165.000										-.8904	-.6621	-.2381	-.0288	-.0083	
169.000								.6856							
174.000						.7927									
180.000	1.1827	.6755	.3919	.3064	.2499	.2811		.5370		-1.0594	-.8708	-.1732	-.0488	-.0193	
305.000			.0841	-.0236	-.0591	-.2222		-.6747		-.3951					
320.000			.1170	.0061	.0222	-.2015		-.5425		-.3735	-.3461	-.1945	-.0944	-.0121	.0545
340.000			.1734	.0464	.0664	.0801		-.4432		-.3474					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1234	.2375	.4689	.0396	-.3358	-.2939	-.2959		-.2508	-.2467					
40.000	.0435	.0553	.1482	-.2813	-.4623	-.2882	-.2562		-.2365	-.2274					
70.000	-.0734	-.1494	.0181	.1530	-.1376	-.3467	-.1405								
90.000	-.0451	-.0870	.0937	.2043	-.1734	-.3072	-.1567								
105.000			.1645	.2720	-.2693	-.3262	-.1840								
110.000								-.2876							
120.000	-.0383	.0204	.2779	.3628	-.3026	-.2838	-.2560	-.2366							
135.000			.3355	.3918	-.2161	-.1579	-.2191								
150.000	-.0147	.0805	.3260	.3333	-.1265	-.0913	-.2111								
165.000	-.0086		.2944		.1192	-.0365	-.2355								
180.000	-.0094	.0786	.2579	.4054											
320.000	.1082	.2681	.3914	.0943	-.2988	-.2959	-.2488								

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## IABIA - PRESSURE SOURCE DATA TABULATION

PAGE 258

ARC11-019 IAB1 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB15)

ALPHA0( 2) = -4.072 BETA0 ( 2) = -4.082

## SECTION ( 1) ORBITER FUSELAGE

## DEPENDENT VARIABLE CP

X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.2081	.5850	.1741	.1104	.1046	.7612		-.6005		-.2896	-.2845	-.1486	-.0568	.0502	.1009
20.000			.2211	.1316	.1054	.2903		-.5218		-.2791					
40.000			.3826	.1675	.1076	.0557		-.6452		-.3488	-.4163	-.1088	-.0282	.0701	.1259
55.000			.4890	.2607	.1617	-.0326		-.2746		-.2461					
70.000			.5284	.2883	.1674	.0146		-.1639		-.2533	-.7583	-.1152	.0250	.0788	
90.000		.7454	.5588	.3242	.1821	.1089		-.0975		-.2885	-.7142	-.1604	.0235	.0690	
120.000			.5731	.3875	.2642	.2186		.1756		-.3073	-.6410	-.4019	.0216	.0407	
140.000										-.3069					
150.000			.5183	.3666	.2884	.2639				-.5151	-.9769	-.2757	.0223	.0221	
151.000									.3035						
156.000								.6317							
162.000									.3492						
165.000										-.9058	-.8528	-.2214	.0088	.0134	
169.000							.6816								
174.000						.7774									
180.000	1.2081	.6869	.4235	.3364	.2177	.2374		.5833		-1.0513	-.8342	-.1555	-.0055	.0066	
305.000			.1648	.0384	-.0284	-.2055		-.6298		-.3616					
320.000			.1664	.0524	-.0053	-.0993		-.5560		-.3358	-.3396	-.1555	-.0624	.0157	.0619
340.000			.1978	.0785	.0914	.1005		-.5444		-.3221					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1259	.2322	.4488	.0351	-.3272	-.2962	-.2846		-.2379	-.2367					
40.000	.0448	.0645	.1364	-.2921	-.4310	-.2698	-.2554		-.2265	-.2163					
70.000	-.0700	-.1415	.0052	.1279	-.1913	-.3749	-.1855								
90.000	-.0271	-.0752	.0765	.1696	-.2390	-.3450	-.2447								
105.000			.1485	.2199	-.3466	-.3594	-.3191								
110.000								-.2744							
120.000	-.0014	.0374	.2547	.3146	-.3745	-.3377	-.3855	-.2429							
135.000			.3271	.3953	-.2682	-.2094	-.2820								
150.000	.0213	.0981	.3244	.3885	-.1536	-.1551	-.2464								
165.000	.0259		.3017		.0593	-.1141	-.2369								
180.000	.0206	.0973	.2798	.4536											
320.000	.0955	.2441	.3684	.0446	-.2925	-.2808	-.2395								

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## 1A81A - PRESSURE SOURCE DATA TABULATION

PAGE 259

ARC11-019 1A81 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB15)

ALPHA0 ( 2 ) = -4.058 BETA0 ( 3 ) = .016

SECTION ( 1 ) ORBITER FUSELAGE	DEPENDENT VARIABLE CP														
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.2192	.5891	.1723	.1121	.1027	.6329		-.5391		-.2590	-.2399	-.1430	-.0352	.0434	.0752
20.000			.1855	.1029	.0852	.2333		-.5208		-.2662					
40.000			.2803	.1026	.0525	.0117		-.7716		-.2975	-.3841	-.1037	-.0182	.0487	.0882
55.000			.3411	.1329	.0483	-.0535		-.4131		-.4030					
70.000			.3721	.1436	.0362	-.0673		-.2885		-.4995	-.8273	-.1296	.0241	.0608	
90.000		.5620	.4112	.1755	.0464	-.0044		-.2244		-.4924	-.7812	-.1926	.0290	.0539	
120.000			.4604	.2791	.1551	.1691		.0448		-.5120	-.7915	-.3560	.0241	.0343	
140.000										-.5835					
150.000			.4678	.3349	.2563	.2655				-.8648	-.9656	-.2345	.0320	.0261	
151.000									.1885						
156.000								.5415							
162.000									.2590						
165.000										-.9162	-.8726	-.1295	.0260	.0250	
169.000								.6500							
174.000							.8057								
180.000	1.2192	.6846	.4453	.3494	.2947	.3292		.6311		-.9516	-1.0102	-.1039	.0260	.0220	
305.000			.3098	.1426	.0857	-.0585		-.4918		-.2380					
320.000			.2446	.1012	.0884	-.0063		-.7133		-.2600	-.3674	-.1224	-.0228	.0364	.0791
340.000			.2225	.0966	.1122	.2459		-.5467		-.2615					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.0844	.1157	.1838	-.0893	-.2969	-.3052	-.2495			-.2263	-.2213				
40.000	.0448	.0635	.0676	-.2337	-.3041	-.2893	-.2556			-.2297	-.2301				
70.000	-.0610	-.1175	-.0155	.0673	-.2658	-.4906	-.2343								
90.000	-.0218	-.0565	.0543	.0920	-.3254	-.4659	-.2975								
105.000			.1174	.1251	-.4468	-.4841	-.4021								
110.000								-.2608							
120.000	.0159	.0403	.1914	.1663	-.5206	-.4771	-.5596	-.2612							
135.000			.2764	.3769	-.3937	-.3237	-.4178								
150.000	.0342	.0965	.2973	.4771	-.2672	-.2819	-.3165								
165.000	.0376		.2988		-.0659	-.2495	-.2109								
180.000	.0372	.1094	.3018	.5344											
320.000	.0464	.1136	.1464	-.1558	-.3041	-.2655	-.2334								

ARC11-019 1A81 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB15)

ALPHA0 ( 2 ) = -4.039 BETA0 ( 4 ) = 4.120

SECTION ( 1 ) ORBITER FUSELAGE		DEPENDENT VARIABLE CP													
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.1906	.5596	.1417	.0895	.0740	.7553		-.5490		-.3020	-.2557	-.1927	-.0739	.0036	.0476
20.000			.1220	.0554	.0330	.0728		-.5649		-.3133					
40.000			.1522	.0239	-.0114	-.1096		-.7602		-.3295	-.3354	-.1488	-.0501	.0251	.0572
55.000			.1844	.0095	-.0535	-.1814		-.5283		-.5198					
70.000			.2115	.0050	-.0812	-.1781		-.4001		-.6335	-.4895	-.3308	.0111	.0637	
90.000	.3452		.2541	.0326	-.0846	-.1193		-.3329		-.6324	-.5177	-.4814	-.0100	.0561	
120.000			.3324	.1551	.0218	.0419		-.0980		-.6836	-.7561	-.4671	-.0528	.0248	
140.000										-.9134					
150.000			.3863	.2798	.1778	.1560				-.9504	-.9697	-.1581	-.0376	.0046	
151.000									.0548						
156.000								.4383							
162.000									.1545						
165.000										-.8772	-.9800	-.1063	-.0225	.0050	
169.000								.5907							
174.000							.7535								
180.000	1.1906	.6429	.4359	.3416	.2605	.3026		.6088		-1.0612	-.8622	-.1052	-.0108	.0058	
305.000			.4564	.2600	.1717	.0017		-.3250		-.2367					
320.000			.3109	.1397	.1083	.0129		-.5772		-.2557	-.5230	-.0976	-.0044	.0484	.1257
340.000			.2354	.1029	.0975	.2461		-.5278		-.2649					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.0762	.1575	.2852	.0323	-.2988	-.2888	-.2936			-.2543	-.2254				
40.000	.0705	.1716	.3152	.0254	-.2851	-.2687	-.2700			-.2783	-.2638				
70.000	-.0441	-.1036	-.0515	.0147	-.3307	-.5447	-.2738								
90.000	-.0121	-.0495	.0140	.0281	-.3971	-.5519	-.3560								
105.000			.0691	.0399	-.5304	-.5595	-.4651								
110.000								-.2357							
120.000	.0050	.0193	.1163	.0373	-.6697	-.6309	-.6975	-.2657							
135.000			.2147	.3182	-.5222	-.5123	-.5311								
150.000	.0180	.0760	.2471	.4864	-.3736	-.4670	-.4085								
165.000	.0195		.2608		-.1547	-.3929	-.2216								
180.000	.0187	.0976	.2848	.4978											
320.000	.0347	.0836	.0860	-.4503	-.3371	-.2883	-.2791								

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ARC11-019 IAB1 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB15)

ALPHA0( 2) = -4.035 BETA0( 5) = 6.171

## SECTION ( 1) ORBITER FUSELAGE

## DEPENDENT VARIABLE CP

X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.1571	.5413	.1239	.0647	.0365	.6755		-.5038		-.3834	-.3087	-.2539	-.1123	-.0514	.0012
20.000			.0831	.0125	-.0089	.0519		-.4718		-.3951					
40.000			.0882	-.0283	-.0645	-.1557		-.5508		-.3891	-.3190	-.1851	-.0858	-.0003	.0450
55.000			.1072	-.0542	-.1091	-.1865		-.5890		-.5261					
70.000			.1289	-.0645	-.1438	-.1947		-.4510		-.6874	-.4498	-.4184	-.0423	.0552	
90.000		.2307	.1732	-.0439	-.1549	-.1570		-.3856		-.6972	-.5228	-.5337	-.0729	.0486	
120.000			.2515	.0806	-.0461	-.0154		-.1719		-.7679	-.5802	-.4955	-.1261	.0104	
140.000										-.9941					
150.000			.3226	.2273	.1315	.1601				-.9941	-.9849	-.1861	-.0901	-.0262	
151.000									-.0275						
156.000								.3602							
162.000									.0868						
165.000										-.8879	-.9987	-.1157	-.0715	-.0265	
169.000								.5387							
174.000							.7083								
180.000	1.1571	.5952	.3999	.3046	.2480	.2648		.5606		-1.0953	-.8724	-.0945	-.0582	-.0274	
305.000			.5241	.3190	.2353	.0589		-.2199		-.1933					
320.000			.3366	.1524	.1269	.0651		-.5515		-.2414	-.6563	-.0983	-.0143	.0492	.1270
340.000			.2307	.0880	.0877	.2991		-.4447		-.2781					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.0370	.1386	.2823	.0364	-.3159	-.3044	-.3050		-.2618	-.2340					
40.000	.0706	.1939	.3436	.0882	-.3060	-.2846	-.2893		-.2831	-.2713					
70.000	-.0415	-.1022	-.0718	-.0128	-.3703	-.5682	-.3012								
90.000	-.0198	-.0614	-.0170	-.0052	-.4365	-.5865	-.3607								
105.000			.0405	.0211	-.5679	-.6044	-.4278								
110.000								-.2457							
120.000	-.0011	.0040	.0801	-.0223	-.7420	-.7162	-.7705	-.2744							
135.000			.1713	.2762	-.5784	-.5995	-.6029								
150.000	-.0053	.0542	.2109	.4513	-.4359	-.5591	-.4734								
165.000	-.0110		.2315		-.2034	-.4564	-.2469								
180.000	-.0114	.0752	.2631	.4410											
320.000	.0230	.0931	.0970	-.4499	-.3578	-.2924	-.2969								

ARC11-019 IAB1 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB15)

ALPHA0( 3) = -2.011 BETA0 ( 1) = -6.134

SECTION ( 1) ORBITER FUSELAGE				DEPENDENT VARIABLE CP											
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.1867	.5995	.1720	.0946	.0900	.7765		-.4475		-.3084	-.2998	-.1678	-.0783	.0610	.1233
20.000			.2461	.1355	.1025	.3390		-.4869		-.2863					
40.000			.4417	.1994	.1356	.0974		-.5926		-.3748	-.3981	-.1167	-.0245	.0936	.1548
55.000			.5612	.3237	.2212	.0863		-.1976		-.2200					
70.000			.5958	.3498	.2242	.1288		-.0976		-.1978	-.6730	-.1436	.0109	.0745	
90.000		.8079	.6085	.3718	.2336	.1714		-.0325		-.1813	-.6533	-.2303	.0060	.0659	
120.000			.5800	.3922	.2707	.2863		.2210		-.2372	-.5985	-.8169	-.0226	-.0043	
140.000										-.2706					
150.000			.4817	.3188	.2565	.2996				-.3450	-1.0334	-.4034	.0096	-.0218	
151.000									.3274						
156.000								.6446							
162.000									.3552						
165.000										-.9213	-.9230	-.3571	-.0061	-.0252	
169.000								.6664							
174.000						.8250									
180.000	1.1867	.6265	.3468	.2675	.2184	.2658		.5125		-1.0837	-.8821	-.2589	-.0264	-.0282	
305.000			.0882	-.0230	-.0518	-.1743		-.6915		-.3670					
320.000			.1222	.0113	.0089	-.1473		-.5203		-.3609	-.3485	-.2066	-.0879	-.0024	.0665
340.000			.1789	.0516	.0749	.1296		-.4172		-.3382					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1423	.2591	.4724	.0565	-.3353	-.2850	-.2958		-.2483	-.2437					
40.000	.0601	.0858	.1609	-.2653	-.4545	-.2846	-.2616		-.2305	-.2354					
70.000	-.1335	-.2446	-.0253	.1478	-.1552	-.3415	-.1346								
90.000	-.0811	-.1725	.0576	.1984	-.1900	-.3076	-.1509								
105.000			.1359	.2542	-.2967	-.3302	-.1824								
110.000								-.2761							
120.000	-.0860	-.0457	.2555	.3060	-.3317	-.2984	-.2228	-.2239							
135.000			.3296	.3325	-.2601	-.1832	-.2065								
150.000	-.0445	.0424	.3183	.2814	-.1647	-.1187	-.2129								
165.000	-.0317		.2840		.0971	-.0664	-.2337								
180.000	-.0283	.0561	.2497	.3609											
320.000	.1443	.2836	.4111	.1059	-.2925	-.3033	-.2432								

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## 1A81A - PRESSURE SOURCE DATA TABULATION

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ARC11-019 1A81 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB15)

ALPHA0( 3) = -2.000 BETA0 ( 2) = -2.052

SECTION ( 1) ORBITER FUSELAGE				DEPENDENT VARIABLE CP											
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.2185	.6200	.1821	.1052	.0979	.7240		-.5622		-.2583	-.2588	-.1551	-.0382	.0605	.1050
20.000			.2183	.1180	.0933	.2796		-.5280		-.2572					
40.000			.3447	.1399	.0783	.0362		-.7075		-.2976	-.3999	-.1267	-.0176	.0665	.1231
55.000			.4193	.1928	.0986	-.0138		-.3425		-.2646					
70.000			.4424	.2056	.0907	.0197		-.2244		-.3238	-.7789	-.1911	.0136	.0564	
90.000		.6412	.4724	.2370	.1024	.0548		-.1506		-.3803	-.7494	-.3231	.0200	.0504	
120.000			.4851	.3023	.1812	.2030		.1166		-.4197	-.7171	-.4498	.0429	.0301	
140.000										-.4819					
150.000			.4466	.3042	.2327	.2769				-.8397	-1.0097	-.3690	.0552	.0172	
151.000									.2389						
156.000								.5825							
162.000									.2936						
165.000										-.9322	-.8831	-.2938	.0444	.0161	
169.000								.6549							
174.000						.8230									
180.000	1.2185	.6331	.3851	.2970	.2403	.2868		.5960		-1.0259	-1.0351	-.2453	.0346	.0138	
305.000			.2379	.0801	.0351	-.0954		-.5659		-.2364					
320.000			.2136	.0733	.0713	-.0287		-.6110		-.2823	-.3412	-.1660	-.0367	.0354	.0819
340.000			.2185	.0854	.1011	.2148		-.5353		-.2842					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1182	.1879	.3334	-.0489	-.3140	-.2760	-.2722		-.2297	-.2188					
40.000	.0630	.0749	.0778	-.4082	-.3476	-.2609	-.2393		-.2256	-.2154					
70.000	-.1163	-.2077	-.0391	.0875	-.2388	-.4673	-.1821								
90.000	-.0686	-.1351	.0396	.1222	-.2993	-.4394	-.2419								
105.000			.1122	.1570	-.4119	-.4586	-.3006								
110.000								-.2663							
120.000	-.0274	-.0077	.2090	.2557	-.4643	-.4475	-.3847	-.2323							
135.000			.2665	.3830	-.3571	-.3131	-.3654								
150.000	.0043	.0653	.2737	.4498	-.2405	-.2559	-.2984								
165.000	.0096		.2684		-.0450	-.2135	-.2300								
180.000	.0100	.0763	.2681	.4812											
320.000	.0938	.2139	.3138	.0041	-.2737	-.2385	-.2262								

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## IAB1A - PRESSURE SOURCE DATA TABULATION

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ARC11-019 IAB1 LVAP(ELHL SEALED) ORB. FUSELAGE

(RET815)

ALPHA0( 3) = -1.985 BETA0 ( 3) = 2.064

## SECTION ( 1) ORBITER FUSELAGE

## DEPENDENT VARIABLE CP

X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.2079	.6084	.1734	.0994	.0822	.7715		-.5172		-.2486	-.2299	-.1513	-.0429	.0396	.0784
20.000			.1672	.0777	.0549	.1774		-.5531		-.2595					
40.000			.2263	.0603	.0144	-.0366		-.7832		-.2941	-.3418	-.1175	-.0244	.0475	.0875
55.000			.2614	.0573	-.0148	-.1017		-.4703		-.3968					
70.000			.2800	.0580	-.0391	-.0782		-.3453		-.5028	-.8319	-.1829	.0084	.0475	
90.000		.4322	.3159	.0861	-.0383	-.0500		-.2753		-.5476	-.8224	-.3039	.0272	.0423	
120.000			.3633	.1855	.0664	.1057		-.0219		-.6045	-.8677	-.4434	.0227	.0249	
140.000										-.7975					
150.000			.3842	.2622	.1823	.2230				-.9558	-1.0095	-.2375	.0249	.0135	
151.000									.1124						
156.000								.4770							
162.000									.1937						
165.000										-.9372	-.9662	-.1798	.0253	.0132	
169.000								.6069							
174.000							.7752								
180.000	1.2079	.6100	.3907	.2982	.2409	.2853		.6062		-1.0407	-.9726	-.1583	.0261	.0124	
305.000			.3907	.1997	.1353	-.0144		-.3875		-.2504					
320.000			.2929	.1296	.1115	.0342		-.5551		-.2565	-.3901	-.1236	-.0041	.0526	.1209
340.000			.2424	.0996	.1039	.2754		-.4991		-.2516					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.0993	.1416	.2092	-.0324	-.2809	-.2889	-.2898		-.2460	-.2224					
40.000	.0701	.1583	.2532	-.0206	-.2771	-.2598	-.2503		-.2604	-.2585					
70.000	-.1034	-.1635	-.0593	.0313	-.3090	-.5300	-.2492								
90.000	-.0566	-.1021	.0085	.0536	-.3715	-.5209	-.3255								
105.000			.0749	.0828	-.4942	-.5417	-.4090								
110.000								-.2440							
120.000	-.0123	-.0017	.1421	.0976	-.5883	-.5710	-.6223	-.2413							
135.000			.2332	.3374	-.4880	-.4496	-.4866								
150.000	.0082	.0639	.2575	.4522	-.3574	-.4120	-.3607								
165.000	.0105		.2624		-.1428	-.3642	-.2125								
180.000	.0093	.0780	.2673	.4909											
320.000	.0666	.0867	.0695	-.3268	-.2976	-.2799	-.2090								

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## 1A81A - PRESSURE SOURCE DATA TABULATION

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ARC11-019 1A81 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB15)

ALPHA0( 3) = -1.973 BETA0 ( 4) = 6.153

SECTION ( 1) ORBITER FUSELAGE

DEPENDENT VARIABLE CP

X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.1543	.5637	.1372	.0628	.0364	.6658		-.4741		-.3646	-.2997	-.2543	-.1099	-.0292	.0172
20.000			.0950	.0025	-.0139	.0437		-.4296		-.3695					
40.000			.0907	-.0414	-.0755	-.1745		-.4740		-.3537	-.3354	-.1816	-.0802	.0087	.0551
55.000			.1027	-.0716	-.1281	-.2050		-.5832		-.4005					
70.000			.1202	-.0819	-.1581	-.1686		-.4520		-.6196	-.4609	-.3886	-.0373	.0455	
90.000		.2063	.1609	-.0624	-.1650	-.1543		-.3830		-.6744	-.5194	-.5067	-.0529	.0451	
120.000			.2288	.0525	-.0718	-.0081		-.1658		-.7722	-.5783	-.5022	-.0769	.0193	
140.000										-1.0202					
150.000			.2812	.1812	.0923	.1366				-1.0498	-1.0351	-.2387	-.0636	-.0265	
151.000									-.0318						
156.000								.3502							
162.000									.0766						
165.000										-.9316	-1.0424	-.1574	-.0561	-.0330	
169.000								.5257							
174.000							.6826								
180.000	1.1543	.5372	.3502	.2613	.1981	.2497		.5432		-1.1323	-.9077	-.1559	-.0462	-.0387	
305.000			.5403	.3275	.2379	.0750		-.1817		-.1772					
320.000			.3577	.1658	.1279	.0716		-.4591		-.2240	-.6086	-.0992	-.0045	.0585	.1393
340.000			.2427	.0923	.0804	.2998		-.4062		-.2732					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.0551	.1548	.2905	.0399	-.3211	-.3009	-.2990		-.2454	-.2217					
40.000	.0780	.2181	.3541	.1018	-.3207	-.2758	-.2902		-.2756	-.2702					
70.000	-.0862	-.1438	-.1058	-.0292	-.3780	-.5774	-.2807								
90.000	-.0435	-.0882	-.0403	-.0173	-.4479	-.5937	-.3449								
105.000			.0163	.0186	-.5774	-.6139	-.3958								
110.000								-.2370							
120.000	-.0241	-.0200	.0650	.0110	-.7160	-.7161	-.7578	-.2561							
135.000			.1594	.2742	-.5823	-.6105	-.6137								
150.000	-.0191	.0355	.1987	.3950	-.4551	-.5852	-.4543								
165.000	-.0283		.2159		-.2274	-.4915	-.2408								
180.000	-.0348	.0493	.2456	.3950											
320.000	.0495	.1033	.1113	-.4410	-.3394	-.2952	-.2816								



ARC11-019 IAB1 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB15)

ALPHA0( 4) = .079 BETA0 ( 1) = -6.140

SECTION ( 1)ORBITER FUSELAGE				DEPENDENT VARIABLE CP											
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.1737	.6186	.1738	.0909	.0731	.7687		-.4266		-.2761	-.2565	-.1458	-.0577	.0741	.1403
20.000			.2494	.1344	.0915	.3275		-.3204		-.2591					
40.000			.4570	.2112	.1378	.0929		-.4307		-.2686	-.2707	-.0951	-.0059	.1056	.1788
55.000			.5683	.3326	.2216	.0921		-.1335		-.1857					
70.000			.5921	.3455	.2155	.1198		-.0621		-.1804	-.6278	-.1442	-.0051	.0540	
90.000		.7895	.5894	.3581	.2178	.1561		-.0066		-.1614	-.6588	-.2091	-.0074	.0434	
120.000			.5380	.3494	.2331	.2456		.2227		-.2400	-.6147	-.6350	-.0795	-.0503	
140.000										-.3036					
150.000			.4215	.2646	.2061	.2534				-.3583	-1.0971	-.4279	-.0074	-.0416	
151.000									.3094						
156.000								.6305							
162.000									.3284						
165.000										-.9671	-1.0123	-.3715	-.0002	-.0435	
169.000								.6426							
174.000							.7949								
180.000	1.1737	.5685	.2868	.2094	.1718	.2148		.4847		-1.1263	-.9405	-.2349	-.0127	-.0351	
305.000			.0691	-.0539	-.0670	-.2065		-.5478		-.3181					
320.000			.1203	-.0061	-.0061	-.1764		-.3844		-.3227	-.3296	-.1906	-.0662	.0115	.0872
340.000			.1814	.0379	.0632	.1024		-.3511		-.3047					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1590	.2639	.4743	.0485	-.3249	-.2832	-.2758		-.2245	-.2131					
40.000	.0868	.1031	.1774	-.2770	-.4321	-.2744	-.2368		-.2127	-.2142					
70.000	-.1818	-.3284	-.0745	.1189	-.1556	-.2782	-.1229								
90.000	-.1473	-.2557	.0117	.1705	-.1891	-.2748	-.1386								
105.000			.1026	.2244	-.2852	-.3111	-.1734								
110.000								-.2546							
120.000	-.1649	-.1123	.2442	.2422	-.3520	-.2789	-.2105	-.2136							
135.000			.3055	.2723	-.2874	-.1814	-.2048								
150.000	-.0914	.0056	.2925	.2311	-.1995	-.1275	-.2136								
165.000	-.0734		.2543		.0719	-.0763	-.2289								
180.000	-.0616	.0346	.2183	.3059											
320.000	.1628	.2911	.4031	.1026	-.2802	-.2877	-.2324								

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## IA81A - PRESSURE SOURCE DATA TABULATION

PAGE 267

ARC11-019 IA81 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB15)

ALPHA0( 4) = .084 BETA0 ( 2) = -4.099

SECTION ( 1) ORBITER FUSELAGE				DEPENDENT VARIABLE CP											
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.1978	.6363	.1806	.1092	.0879	.7585		-.4386		-.2535	-.2161	-.1310	-.0290	.0690	.1390
20.000			.2370	.1342	.0913	.3044		-.3526		-.2482					
40.000			.3995	.1823	.1085	.0701		-.4598		-.2653	-.3431	-.0930	.0012	.0888	.1678
55.000			.4901	.2664	.1588	.0425		-.2205		-.2346					
70.000			.5107	.2781	.1477	.0510		-.1280		-.2263	-.7116	-.1470	-.0018	.0444	
90.000		.7090	.5177	.2966	.1512	.0815		-.0711		-.2247	-.7031	-.2015	-.0018	.0376	
120.000			.4951	.3201	.1964	.2152		.1753		-.3002	-.6629	-.3636	-.0391	-.0190	
140.000										-.3690					
150.000			.4135	.2736	.2091	.2480				-.6052	-1.0854	-.4073	.0216	-.0062	
151.000									.2639						
156.000								.6053							
162.000									.2999						
165.000										-.9563	-.9245	-.3398	.0322	-.0028	
169.000								.6441							
174.000							.8018								
180.000	1.1978	.5834	.3077	.2312	.1796	.2326		.5387		-1.0952	-.9314	-.1982	.0133	-.0040	
305.000			.1499	.0082	-.0215	-.1618		-.4865		-.2865					
320.000			.1770	.0319	.0360	-.1028		-.3611		-.2849	-.3010	-.1605	-.0467	.0457	.0976
340.000			.2145	.0616	.0800	.1497		-.3407		-.2781					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1689	.2511	.4568	.0415	-.3054	-.2777	-.2615		-.2091	-.2015					
40.000	.0950	.1002	.1633	-.3273	-.3913	-.2617	-.2258		-.2019	-.1913					
70.000	-.1689	-.3133	-.0763	.0835	-.2095	-.3399	-.1347								
90.000	-.1380	-.2373	.0131	.1255	-.2626	-.3341	-.1548								
105.000			.1011	.1629	-.3713	-.3536	-.1845								
110.000								-.2537							
120.000	-.1220	-.0767	.2262	.1999	-.4577	-.3257	-.2465	-.2167							
135.000			.2786	.2749	-.3891	-.2312	-.2434								
150.000	-.0574	.0314	.2721	.2434	-.2636	-.1871	-.2434								
165.000	-.0460		.2480		-.0005	-.1552	-.2274								
180.000	-.0364	.0503	.2271	.3627											
320.000	.1419	.2755	.3756	.0582	-.2762	-.2581	-.2201								

ARC11-019 1A81 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB15)

ALPHA( 4) = .085 BETA( 3) = -.004

## SECTION ( 1) ORBITER FUSELAGE

## DEPENDENT VARIABLE CP

X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.2153	.6418	.1847	.1034	.0808	.6258		-.4689		-.2331	-.1860	-.1217	-.0118	.0636	.1105
20.000			.1983	.1000	.0648	.2321		-.4238		-.2331					
40.000			.2913	.1004	.0428	.0066		-.5582		-.2610	-.3093	-.1046	.0010	.0704	.1290
55.000			.3354	.1295	.0344	-.0522		-.3840		-.2930					
70.000			.3486	.1261	.0128	-.0378		-.2703		-.3145	-.7891	-.1537	.0025	.0330	
90.000		.5234	.3718	.1496	.0150	-.0051		-.2001		-.3628	-.8146	-.1989	.0134	.0312	
120.000			.3935	.2210	.1048	.1381		.0593		-.4947	-.7601	-.3739	.0296	.0161	
140.000										-.5880					
150.000			.3757	.2494	.1691	.2217				-.9138	-1.0310	-.3382	.0455	.0181	
151.000									.1644						
156.000								.5248							
162.000									.2247						
165.000										-.9517	-.9479	-.1887	.0300	.0155	
169.000								.6201							
174.000							.7720								
180.000	1.2153	.5805	.3381	.2551	.1713	.2598		.5968		-1.0124	-1.0744	-.1557	.0274	.0140	
305.000			.3114	.1313	.0781	-.0677		-.3397		-.2596					
320.000			.2694	.0978	.0854	-.0078		-.4382		-.2532	-.2977	-.1132	-.0081	.0624	.1173
340.000			.2460	.0876	.0934	.2360		-.4201		-.2315					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1256	.1407	.1870	-.0856	-.2876	-.2734	-.2416		-.2018	-.2007					
40.000	.0908	.1053	.1015	-.1749	-.2929	-.2624	-.2336		-.2041	-.1923					
70.000	-.1560	-.2696	-.0796	.0450	-.2771	-.5173	-.1813								
90.000	-.1145	-.1875	.0013	.0690	-.3420	-.5041	-.2067								
105.000			.0717	.1107	-.4599	-.5287	-.2291								
110.000								-.2449							
120.000	-.0551	-.0323	.1435	.2310	-.5208	-.5171	-.4394	-.2327							
135.000			.2084	.4116	-.4141	-.3943	-.3903								
150.000	-.0213	.0372	.2365	.4376	-.3284	-.3511	-.3249								
165.000	-.0175		.2403		-.1326	-.3124	-.2042								
180.000	-.0152	.0535	.2422	.4678											
320.000	.0935	.1473	.1552	-.1139	-.2844	-.2427	-.2274								

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## IABIA - PRESSURE SOURCE DATA TABULATION

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ARC11-019 IAB1 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB15)

ALPHA0( 4) = .097 BETA0( 4) = 4.092

SECTION ( 1) ORBITER FUSELAGE				DEPENDENT VARIABLE CP											
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.1839	.6028	.1535	.0716	.0504	.7453		-.4631		-.2831	-.2441	-.1906	-.0710	.0204	.0677
20.000			.1302	.0333	.0110	.0976		-.4239		-.2884					
40.000			.1531	-.0001	-.0460	-.1243		-.3713		-.2892	-.3133	-.1519	-.0554	.0295	.0727
55.000			.1664	-.0273	-.0949	-.1762		-.5099		-.2831					
70.000			.1824	-.0346	-.1263	-.1411		-.4033		-.3933	-.8672	-.2275	-.0238	.0230	
90.000		.2950	.2186	-.0139	-.1255	-.1183		-.3310		-.5893	-.7912	-.3615	.0124	.0192	
120.000			.2646	.0850	-.0283	.0297		-.0938		-.6903	-.9416	-.4530	.0052	.0086	
140.000										-.9480					
150.000			.2950	.1827	.0988	.1507				-1.0530	-1.0656	-.2471	.0075	-.0121	
151.000									.0303						
156.000								.4091							
162.000									.1127						
165.000										-.9861	-1.0783	-.1820	.0033	-.0178	
169.000								.5485							
174.000							.7256								
180.000	1.1839	.5294	.3243	.2377	.1793	.2345		.5591		-1.1326	-.9489	-.1945	.0132	-.0224	
305.000			.4657	.2603	.1836	.0278		-.2358		-.2037					
320.000			.3322	.1441	.1162	.0525		-.4708		-.2295	-.3955	-.1042	.0097	.0639	.1456
340.000			.2471	.0882	.0825	.2871		-.3857		-.2614					
X/LB															
	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.0938	.1705	.2943	.0330	-.3251	-.2996	-.3111		-.2339	-.2212					
40.000	.0892	.2008	.3231	.0323	-.3098	-.2778	-.2708		-.2535	-.2515					
70.000	-.1537	-.2265	-.1192	-.0175	-.3631	-.5863	-.2693								
90.000	-.0990	-.1583	-.0493	.0028	-.4343	-.5836	-.3361								
105.000			.0182	.0261	-.5585	-.6092	-.3872								
110.000								-.2196							
120.000	-.0511	-.0501	.0818	.0568	-.6654	-.6608	-.7061	-.2376							
135.000			.1769	.3147	-.5610	-.5617	-.5627								
150.000	-.0347	.0185	.1949	.4362	-.4295	-.5248	-.4190								
165.000	-.0347		.2049		-.2204	-.4648	-.2426								
180.000	-.0374	.0350	.2282	.3802											
320.000	.0733	.1018	.1061	-.4608	-.3405	-.2935	-.2760								

ORIGINAL PAGE IS  
OF POOR QUALITY

ARC11-019 IAB1 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB15)

ALPHA0( 4) = .102 BETA0( 5) = 6.138

## SECTION ( 1) ORBITER FUSELAGE

## DEPENDENT VARIABLE CP

X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.1534	.5936	.1431	.0622	.0264	.6544		-.4396		-.3410	-.2688	-.2342	-.0897	-.0133	.0387
20.000			.1000	.0050	-.0247	.0427		-.4219		-.3319					
40.000			.0914	-.0426	-.0868	-.1763		-.4185		-.3088	-.3198	-.1650	-.0667	.0181	.0742
55.000			.0922	-.0834	-.1436	-.2125		-.5441		-.3081					
70.000			.1081	-.0925	-.1710	-.1763		-.4427		-.4060	-.6328	-.3156	-.0315	.0317	
90.000		.1885	.1454	-.0678	-.1805	-.1555		-.3709		-.6470	-.5151	-.4666	-.0197	.0340	
120.000			.2005	.0336	-.0905	-.0170		-.1530		-.7571	-.5828	-.5025	-.0409	.0173	
140.000										-1.0139					
150.000			.2433	.1479	.0562	.1132				-1.0682	-1.0652	-.2767	-.0341	-.0208	
151.000									-.0407						
156.000								.3474							
162.000									.0603						
165.000										-.9406	-1.0774	-.1919	-.0277	-.0292	
169.000								.5161							
174.000							.6471								
180.000	1.1534	.4883	.3046	.2123	.1574	.2167		.5274		-1.1386	-.9318	-.2362	-.0160	-.0364	
305.000			.5493	.3338	.2517	.0854		-.1337		-.1470					
320.000			.3800	.1776	.1424	.0712		-.3849		-.1883	-.4555	-.0952	.0105	.0822	.1576
340.000			.2599	.0930	.0777	.2883		-.3357		-.2521					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.0841	.1722	.3050	.0514	-.3181	-.2930	-.3000			-.2294	-.2035				
40.000	.1112	.2351	.3637	.1096	-.3120	-.2641	-.2687			-.2538	-.2465				
70.000	-.1256	-.1928	-.1258	-.0359	-.3764	-.5899	-.2527								
90.000	-.0822	-.1283	-.0534	-.0206	-.4449	-.5998	-.3184								
105.000			.0056	.0178	-.5724	-.6260	-.3836								
110.000									-.2130						
120.000	-.0448	-.0382	.0559	.0689	-.6984	-.7108	-.7417	-.2332							
135.000			.1428	.2859	-.5777	-.6134	-.6134								
150.000	-.0360	.0224	.1889	.3293	-.4650	-.5951	-.4340								
165.000	-.0467		.2060		-.2500	-.5104	-.2409								
180.000	-.0585	.0335	.2285	.3521											
320.000	.0750	.1321	.1317	-.4437	-.3295	-.3042	-.2764								

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## IABIA - PRESSURE SOURCE DATA TABULATION

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ARC11-019 IAB1 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB15)

ALPHA0(5) = 2.176 BETA0(1) = -6.134

SECTION (1) ORBITER FUSELAGE				DEPENDENT VARIABLE CP											
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.1691	.6479	.1888	.0975	.0786	.7699		-.4146		-.2658	-.2375	-.1348	-.0460	.0896	.1585
20.000			.2729	.1461	.0998	.3347		-.2983		-.2473					
40.000			.4751	.2304	.1531	.1048		-.3706		-.2409	-.2386	-.0826	.0057	.1214	.2007
55.000			.5789	.3477	.2333	.0979		-.1180		-.1578					
70.000			.5994	.3523	.2132	.1210		-.0543		-.1635	-.5705	-.1623	-.0241	.0465	
90.000		.7754	.5762	.3508	.2033	.1559		.0003		-.1556	-.6410	-.2344	-.0373	.0322	
120.000			.5053	.3208	.1998	.2216		.2205		-.2344	-.6200	-.6437	-.1432	-.0926	
140.000										-.3159					
150.000			.3732	.2152	.1657	.2212				-.3886	-1.1140	-.4957	-.0313	-.0475	
151.000									.2966						
156.000								.6205							
162.000									.3128						
165.000										-.9826	-1.0450	-.4817	-.0143	-.0426	
169.000								.6277							
174.000							.7799								
180.000	1.1691	.5156	.2353	.1660	.1289	.1840		.4682		-1.1280	-.9585	-.4141	.0091	-.0331	
305.000			.0637	-.0538	-.0761	-.2055		-.4988		-.3072					
320.000			.1320	-.0074	-.0033	-.1748		-.3684		-.3052	-.3102	-.1910	-.0642	.0270	.1102
340.000			.1962	.0409	.0695	.1057		-.3416		-.2839					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1798	.2767	.4806	.0604	-.3154	-.2778	-.2601		-.2178	-.2007					
40.000	.1106	.1286	.1998	-.2682	-.4137	-.2751	-.2301		-.2113	-.2018					
70.000	-.2163	-.4244	-.1102	.1049	-.1435	-.3147	-.1171								
90.000	-.1774	-.3593	-.0187	.1529	-.1765	-.2976	-.1380								
105.000			.0763	.2004	-.2733	-.3230	-.1734								
110.000								-.2539							
120.000	-.2295	-.1893	.2325	.1848	-.3477	-.2909	-.1983	-.2132							
135.000			.2849	.2140	-.3185	-.1993	-.2117								
150.000	-.1233	-.0183	.2696	.1692	-.2341	-.1475	-.2189								
165.000	-.0974		.2278		.0592	-.0882	-.2273								
180.000	-.0807	.0151	.1993	.2379											
320.000	.1888	.3001	.4051	.1074	-.2820	-.2731	-.2193								

ARC11-019 IAB1 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB15)

ALPHA0( 5) = 2.181 BETA0( 2) = -2.059

SECTION ( 1) ORBITER FUSELAGE		DEPENDENT VARIABLE CP													
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.2059	.6681	.1985	.1047	.0897	.7212		-.4279		-.2211	-.1877	-.1069	-.0085	.0784	.1281
20.000			.2385	.1233	.0859	.2699		-.3096		-.2181					
40.000			.3640	.1541	.0844	.0300		-.4221		-.2226	-.2740	-.1000	.0006	.0856	.1608
55.000			.4199	.2012	.1007	-.0087		-.2712		-.2415					
70.000			.4253	.2000	.0726	.0090		-.1817		-.2608	-.7317	-.1728	-.0315	.0256	
90.000		.6007	.4320	.2092	.0749	.0405		-.1228		-.2854	-.7620	-.2162	-.0255	.0196	
120.000			.4133	.2373	.1229	.1636		.1202		-.3936	-.7114	-.3422	-.0441	-.0187	
140.000										-.4917					
150.000			.3527	.2167	.1502	.2113			.2108	-.8813	-1.0457	-.4576	.0120	-.0028	
151.000								.5587							
156.000									.2513						
162.000										-.9948	-.9580	-.4417	.0423	.0048	
165.000								.6179							
169.000							.7692								
174.000								.5557		-1.1136	-1.0882	-.2801	.0222	.0040	
180.000	1.2059	.5290	.2769	.2062	.1536	.2183		-.3508		-.2790					
305.000			.2295	.0749	.0277	-.1187		-.2453		-.2606	-.2689	-.1401	-.0142	.0607	.1132
320.000			.2388	.0768	.0654	-.0529		-.3228		-.2461					
340.000			.2407	.0829	.0911	.1956									
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1475	.1993	.3253	-.0540	-.3121	-.2709	-.2597		-.2166	-.2045					
40.000	.1060	.1062	.0915	-.3926	-.3288	-.2621	-.2315		-.2026	-.1919					
70.000	-.2056	-.3770	-.1289	.0368	-.2680	-.4305	-.1564								
90.000	-.1592	-.2984	-.0288	.0585	-.3330	-.4351	-.1736								
105.000			.0675	.0818	-.4341	-.4789	-.1976								
110.000								-.2412							
120.000	-.1245	-.1130	.1741	.1046	-.5193	-.4598	-.2641	-.2187							
135.000			.2245	.2749	-.4538	-.3356	-.2729								
150.000	-.0631	-.0060	.2089	.3430	-.3296	-.2849	-.2641								
165.000	-.0509		.1967		-.1082	-.2544	-.2179								
180.000	-.0421	.0169	.1936	.4247											
320.000	.1371	.2354	.3249	.0122	-.2709	-.2277	-.2087								

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## IAB1A - PRESSURE SOURCE DATA TABULATION

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ARC11-019 IAB1 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB15)

ALPHA0 ( 5 ) = 2.185 BETA0 ( 3 ) = 2.048

SECTION ( 1 ) ORBITER FUSELAGE				DEPENDENT VARIABLE CP											
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.1955	.6550	.1905	.0969	.0741	.7649		-.4452		-.2116	-.1814	-.1274	-.0273	.0604	.1074
20.000			.1854	.0794	.0485	.1652		-.3877		-.2276					
40.000			.2364	.0672	.0061	-.0534		-.2523		-.2420	-.2749	-.1240	-.0148	.0623	.1112
55.000			.2574	.0553	-.0253	-.1232		-.3566		-.2982					
70.000			.2625	.0404	-.0604	-.0994		-.3126		-.3487	-.8174	-.1532	-.0273	.0137	
90.000		.3944	.2835	.0610	-.0589	-.0666		-.2520		-.4052	-.8557	-.2098	-.0083	.0156	
120.000			.3038	.1313	.0195	.0712		-.0048		-.5711	-.8270	-.3854	.0152	.0076	
140.000										-.7425					
150.000			.2976	.1802	.1035	.1627				-1.0161	-1.0745	-.4226	.0407	.0010	
151.000									.0912						
156.000								.4604							
162.000									.1584						
165.000										-1.0119	-1.0238	-.2712	.0255	-.0009	
169.000								.5733							
174.000							.7402								
180.000	1.1955	.5033	.2882	.2014	.1506	.2152		.5657		-1.1338	-1.0380	-.2538	.0220	-.0055	
305.000			.3957	.1976	.1359	-.0183		-.2190		-.2151					
320.000			.3237	.1360	.1151	.0276		-.4105		-.2231	-.2664	-.0990	.0152	.0729	.1491
340.000			.2638	.0997	.0981	.2658		-.3046		-.2319					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1292	.1657	.2399	-.0103	-.2929	-.2917	-.2892		-.2298	-.2031					
40.000	.1070	.1818	.2743	-.0213	-.2834	-.2546	-.2425		-.2321	-.2310					
70.000	-.2080	-.3197	-.1401	-.0034	-.3315	-.5689	-.2016								
90.000	-.1542	-.2335	-.0557	.0192	-.4021	-.5578	-.2395								
105.000			.0127	.0605	-.5263	-.5888	-.2624								
110.000								-.2290							
120.000	-.0864	-.0859	.0742	.1688	-.5846	-.6106	-.4703	-.2214							
135.000			.1664	.3346	-.4947	-.4993	-.5197								
150.000	-.0519	-.0015	.1912	.3701	-.4102	-.4698	-.3773								
165.000	-.0477		.1943		-.2018	-.4227	-.2191								
180.000	-.0500	.0134	.1958	.4263											
320.000	.1025	.1154	.0895	-.3299	-.3055	-.2743	-.2654								



ARC11-019 IAB1 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB:5)

ALPHA( 5) = 2.183 BETA( 4) = 6.140

SECTION ( 1) ORBITER FUSELAGE				DEPENDENT VARIABLE CP											
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.1469	.6186	.1632	.0662	.0284	.6449		-.4358		-.3221	-.2722	-.2330	-.0991	-.0056	.0468
20.000			.1141	.0042	-.0238	.0371		-.4294		-.3183					
40.000			.0998	-.0475	-.0886	-.1905		-.3901		-.2882	-.3127	-.1779	-.0757	.0298	.0800
55.000			.0948	-.0935	-.1473	-.2247		-.5141		-.2890					
70.000			.1018	-.1091	-.1828	-.1798		-.4449		-.3567	-.8525	-.2771	-.0556	.0264	
90.000		.1590	.1319	-.0878	-.1885	-.1507		-.3667		-.5885	-.5274	-.4258	-.0200	.0268	
120.000			.1786	.0023	-.1090	-.0194		-.1459		-.7494	-.6232	-.4678	-.0282	.0223	
140.000										-1.0184					
150.000			.2065	.1027	.0186	.0961				-1.1001	-1.0910	-.3319	.0008	-.0188	
151.000									-.0425						
156.000								.3421							
162.000									.0569						
165.000										-1.0103	-1.1035	-.2831	-.0022	-.0276	
169.000								.5032							
174.000							.6373								
180.000	1.1469	.4307	.2575	.1712	.1113	.1910		.5028		-1.1547	-.9640	-.4049	.0019	-.0398	
305.000			.5666	.3522	.2612	.0961		-.1085		-.1290					
320.000			.4032	.1984	.1482	.0850		-.3131		-.1760					
340.000			.2758	.1064	.0751	.3051		-.2882		-.2497					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.0880	.1828	.3095	.0505	-.3180	-.2939	-.3064		-.2269	-.2132					
40.000	.1234	.2481	.3617	.1169	-.3348	-.2560	-.2744		-.2525	-.2544					
70.000	-.1725	-.2461	-.1645	-.0481	-.3922	-.5920	-.2626								
90.000	-.1163	-.1770	-.0909	-.0268	-.4600	-.6011	-.3182								
105.000			-.0262	.0217	-.5833	-.6325	-.3804								
110.000									-.2026						
120.000	-.0616	-.0692	.0333	.0971	-.6803	-.7124	-.7346		-.2250						
135.000			.1222	.3255	-.5678	-.6255	-.6124								
150.000	-.0502	.0024	.1632	.5454	-.4655	-.6118	-.4295								
165.000	-.0658		.1130		-.3245	-.5378	-.2424								
180.000	-.0779	.0131	.2079	.2737											
320.000	.0967	.1437	.1499	-.4463	-.3264	-.3083	-.2785								

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## 1A81A - PRESSURE SOURCE DATA TABULATION

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ARC11-019 1A81 LVAP (ELHL SEALED) ORB. FUSELAGE

(RETB15)

ALPHA0 ( 6 ) = 4.251 BETA0 ( 1 ) = -6.118

SECTION ( 1 ) ORBITER FUSELAGE				DEPENDENT VARIABLE CP											
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.1655	.6797	.2063	.1088	.0770	.7751		-.4056		-.2605	-.2284	-.1314	-.0413	.1009	.1737
20.000			.2928	.1644	.1050	.3459		-.3098		-.2391					
40.000			.5021	.2565	.1656	.1172		-.3918		-.2165	-.2073	-.0740	.0218	.1385	.2204
55.000			.5924	.3644	.2414	.1065		-.1051		-.1376					
70.000			.5866	.3539	.2111	.1143		-.0380		-.1504	-.5534	-.1690	-.0402	.0373	
90.000		.7670	.5615	.3434	.1944	.1369		.0138		-.1350	-.6431	-.2411	-.0547	.0211	
120.000			.4669	.2840	.1653	.1476		.2210		-.2242	-.6275	-.6429	-.2231	-.1305	
140.000										-.3159					
150.000			.3225	.1727	.1198	.1808				-.4075	-.9048	-.5279	-.1238	-.0438	
151.000									.2905						
156.000								.6169							
162.000									.2992						
165.000										-.9945	-.7312	-.5245	-.0970	-.0336	
169.000								.6206							
174.000							.7640								
180.000	1.1655	.4689	.1828	.1213	.0910	.1525		.4525		-1.1283	-.8349	-.5029	-.0504	-.0178	
305.000			.0650	-.0598	-.0687	-.2152		-.4347		-.2800					
320.000			.1441	-.0014	.0075	-.1797		-.3604		-.2902	-.2928	-.2041	-.0590	.0454	.1278
340.000			.2144	.0455	.0728	.1044		-.3382		-.2732					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1959	.2800	.4838	.0655	-.3239	-.2784	-.2730			-.2244	-.2026				
40.000	.1323	.1420	.2133	-.2753	-.4118	-.2822	-.2316			-.2079	-.2026				
70.000	-.2244	-.4957	-.1393	.0973	-.1238	-.3583	-.1168								
90.000	-.2076	-.4176	-.0572	.1379	-.1538	-.3235	-.1383								
105.000			.0477	.1728	-.2436	-.3382	-.1590								
110.000								-.2425							
120.000	-.2917	-.2608	.2076	.1256	-.3545	-.3122	-.2023	-.2110							
135.000			.2327	.1443	-.3734	-.2335	-.2255								
150.000	-.1461	-.0305	.2225	.1117	-.2728	-.1642	-.2277								
165.000	-.1200		.1887		.0326	-.0980	-.2315								
180.000	-.1033	-.0057	.1626	.2108											
320.000	.2072	.3122	.4041	.1154	-.2898	-.2806	-.2154								

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OF POOR QUALITY

ARC11-019 IAB1 LVAP(ELHL SEALED) ORB. FUSELAGE

(RET015)

ALPHA0( 6) = 4.253 BETA0( 2) = -4.076

SECTION ( 1) ORBITER FUSELAGE		DEPENDENT VARIABLE CP													
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.1883	.6903	.2184	.1133	.0917	.7728		-.3931		-.2282	-.1884	-.1059	-.0222	.0895	.1629
20.000			.2822	.1489	.1028	.3117		-.2829		-.2176					
40.000			.4488	.2111	.1328	.0755		-.3729		-.2089	-.2300	-.0773	.0151	.1178	.1982
55.000			.5161	.2844	.1757	.0372		-.1729		-.1792					
70.000			.5118	.2734	.1426	.0611		-.1055		-.1916	-.6304	-.1704	-.0437	.0283	
90.000		.6823	.4968	.2730	.1335	.0933		-.0490		-.1826	-.7002	-.2387	-.0524	.0204	
120.000			.4353	.2525	.1326	.1711		.1735		-.2977	-.6712	-.4156	-.1480	-.0808	
140.000										-.3933					
150.000			.3243	.1759	.1222	.1879				-.5920	-.7932	-.5216	-.1219	-.0232	
151.000									.2518						
156.000								.5882							
162.000									.2748						
165.000										-1.0158	-.8514	-.5246	-.0404	-.0145	
169.000								.6138							
174.000							.7809								
180.000	1.1883	.4788	.2199	.1483	.1081	.1757		.5008		-1.1068	-.7497	-.4518	-.0222	-.0019	
305.000			.1561	.0120	-.0206	-.1647		-.4181		-.2848					
320.000			.1990	.0469	.0434	-.1034		-.2659		-.2684	-.2557	-.1648	-.0332	.0577	.1199
340.000			.2388	.0735	.0851	.1542		-.2911		-.2558					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1955	.2763	.4633	.0600	-.3193	-.2733	-.2698		-.2187	-.2092					
40.000	.1291	.1406	.1893	-.3253	-.3920	-.2635	-.2246		-.2031	-.1895					
70.000	-.2366	-.4730	-.1542	.0600	-.1772	-.3883	-.1380								
90.000	-.1973	-.3984	-.0509	.0808	-.2158	-.3587	-.1680								
105.000			.0614	.0995	-.3075	-.3796	-.1816								
110.000								-.2389							
120.000	-.2202	-.2012	.1865	.0851	-.4149	-.3582	-.2229	-.2016							
135.000			.2214	.1722	-.4297	-.2732	-.2545								
150.000	-.1080	-.0388	.2070	.1578	-.3109	-.2272	-.2408								
165.000	-.0924		.1827		-.0461	-.1843	-.2187								
180.000	-.0780	-.0141	.1473	.3234											
320.000	.1927	.2903	.3875	.0684	-.2677	-.2614	-.1993								

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## IA81A - PRESSURE SOURCE DATA TABULATION

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ARC11-019 IA81 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB15)

ALPHA0( 6) = 4.252 BETA0 ( 3) = .002

SECTION ( 1) ORBITER FUSELAGE		DEPENDENT VARIABLE CP													
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.2032	.6949	.2151	.1183	.0914	.6162		-.4148		-.2055	-.1657	-.0980	-.0006	.0887	.1324
20.000			.2344	.1160	.0744	.2218		-.3631		-.2055					
40.000			.3175	.1251	.0573	-.0119		-.3225		-.2134	-.2604	-.1261	.0024	.0906	.1510
55.000			.3446	.1323	.0407	-.0774		-.2863		-.2461					
70.000			.3423	.1172	-.0021	-.0548		-.2265		-.2875	-.7546	-.2125	-.0458	.0183	
90.000		.4841	.3469	.1225	-.0029	-.0150		-.1652		-.3209	-.7896	-.2463	-.0360	.0130	
120.000			.3322	.1604	.0485	.1055		.0691		-.4678	-.7615	-.3959	-.0481	-.0085	
140.000										-.5910					
150.000			.2882	.1596	.0936	.1663				-.9509	-.6938	-.4951	-.0096	.0091	
151.000									.1557						
156.000								.5115							
162.000									.2008						
165.000										-1.0190	-.8547	-.4589	.0201	.0137	
169.000								.5905							
174.000							.7470								
180.000	1.2032	.4691	.2379	.1679	.1200	.2031		.5597		-1.1572	-.9373	-.3673	-.0040	.0118	
305.000			.3253	.1460	.0875	-.0651		-.2547		-.2326					
320.000			.3047	.1221	.0990	-.0043		-.2235		-.2288	-.2441	-.1276	.0167	.0800	.1449
340.000			.2729	.1039	.0975	.2348		-.2833		-.2281					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1498	.1601	.1806	-.0888	-.3178	-.2723	-.2398		-.1945	-.1945					
40.000	.1205	.1419	.1268	-.1453	-.3284	-.2742	-.2307		-.1908	-.1908					
70.000	-.2336	-.4354	-.1718	.0067	-.2927	-.4860	-.1787								
90.000	-.1847	-.3508	-.0733	.0192	-.3716	-.4834	-.2136								
105.000			.0161	.0415	-.4792	-.5118	-.2515								
110.000								-.2424							
120.000	-.1248	-.1449	.0866	.1366	-.5603	-.5366	-.3685	-.2124							
135.000			.1385	.3310	-.4815	-.4406	-.3157								
150.000	-.0724	-.0369	.1624	.4049	-.3708	-.3924	-.2880								
165.000	-.0618		.1662		-.1753	-.3537	-.2067								
180.000	-.0539	-.0089	.1711	.3750											
320.000	.1358	.1700	.1817	-.0900	-.2681	-.2610	-.2102								

ORIGINAL PAGE IS  
OF POOR QUALITY

ARC11-019 IA81 LVAP(ELHL SEALED) ORB. FUSELAGE

(RET815)

ALPHA0( 6) = 4.253 BETA0 ( 4) = 4.095

## SECTION ( 1) ORBITER FUSELAGE

## DEPENDENT VARIABLE CP

X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.1705	.6601	.1874	.0868	.0543	.7348		-.4408		-.2466	-.2021	-.1604	-.0409	.0453	.0991
20.000			.1586	.0474	.0103	.0832		-.3790		-.2493					
40.000			.1734	.0172	-.0344	-.1334		-.2519		-.2428	-.2704	-.1593	-.0265	.0578	.1110
55.000			.1730	-.0184	-.0875	-.1887		-.3517		-.2777					
70.000			.1711	-.0325	-.1292	-.1507		-.3551		-.3528	-.8362	-.1643	-.0341	.0096	
90.000		.2595	.1913	-.0187	-.1295	-.1125		-.3016		-.4274	-.8875	-.2251	-.0124	.0104	
120.000			.2178	.0509	-.0620	.0113		-.0617		-.6399	-.8764	-.3858	-.0018	.0070	
140.000										-.9054					
150.000			.2182	.1106	.0318	.1031				-1.0947	-.9090	-.4261	.0168	-.0032	
151.000									.0240						
156.000								.4008							
162.000									.0903						
165.000										-1.0440	-.8826	-.3334	.0127	-.0078	
169.000								.5272							
174.000							.6832								
180.000	1.1705	.4233	.2330	.1521	.0975	.1591		.5306		-1.1800	-.9320	-.4029	.0202	-.0154	
305.000			.4937	.2858	.1967	.0287		-.1418		-.1598					
320.000			.3810	.1792	.1187	.0588		-.3315		-.1829	-.2310	-.0747	.0320	.0976	.1895
340.000			.2831	.1112	.0716	.2845		-.2766		-.2289					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1363	.2027	.3151	.0444	-.2943	-.2909	-.2856		-.2250	-.1895					
40.000	.1408	.2310	.3384	.0498	-.2878	-.2439	-.2320		-.2300	-.2174					
70.000	-.2280	-.3556	-.1798	-.0458	-.3704	-.5901	-.1994								
90.000	-.1746	-.2649	-.0952	-.0251	-.4469	-.5912	-.2289								
105.000			-.0309	.0108	-.5762	-.6310	-.2626								
110.000								-.2195							
120.000	-.0962	-.1220	.0311	.1247	-.6344	-.6690	-.5198	-.2130							
135.000			.1224	.2988	-.5438	-.5694	-.5462								
150.000	-.0629	-.0301	.1438	.3998	-.4475	-.5433	-.3844								
165.000	-.0709		.1515		-.2691	-.4970	-.2172								
180.000	-.0763	-.0122	.1614	.3190											
320.000	.1143	.1451	.1438	-.4622	-.3199	-.2806	-.2631								

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## 1A81A - PRESSURE SOURCE DATA TABULATION

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ARC11-019 1A81 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB15)

ALPHA( 6) = 4.245 BETA( 5) = 6.148

SECTION ( 1) ORBITER FUSELAGE		DEPENDENT VARIABLE CP													
X/LB	.0000	.0080	.0230	.0450	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.1361	.6438	.1743	.0716	.0309	.6149		-.4311		-.3021	-.2484	-.2214	-.0938	.0067	.0604
20.000			.1196	.0119	-.0211	-.0018		-.4279		-.2911					
40.000			.1002	-.0341	-.0839	-.2130		-.3448		-.2715	-.2983	-.1756	-.0813	.0400	.1034
55.000			.0898	-.0930	-.1500	-.2426		-.4702		-.2911					
70.000			.0932	-.1055	-.1899	-.1950		-.4324		-.3617	-.8538	-.2575	-.0458	.0112	
90.000		.1413	.1161	-.0953	-.1948	-.1543		-.3542		-.4377	-.6161	-.4131	-.0118	.0173	
120.000			.1518	-.0151	-.1785	-.0310		-.1294		-.7292	-.8100	-.4785	-.0122	.0162	
140.000										-1.0070					
150.000			.1665	.0667	-.0218	.0727				-1.1152	-1.0840	-.3398	-.0039	-.0054	
151.000									-.0531						
156.000								.3393							
162.000									.0368						
165.000										-1.0352	-1.0889	-.3530	.0127	-.0168	
169.000								.4889							
174.000						.6252									
180.000	1.1361	.3743	.2057	.1259	.0542	.1560		.4795		-1.1682	-.9064	-.4947	-.0114	-.0343	
305.000			.5798	.3631	.2643	.0980		-.0890		-.1063					
320.000			.4300	.2115	.1088	.0854		-.2696		-.1558	-.2850	-.0647	.0347	.1079	.1951
340.000			.2955	.1134	.0374	.2973		-.2718		-.2328					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.0996	.1833	.3110	.0355	-.2987	-.2831	-.2859		-.2206	-.1936					
40.000	.1483	.2502	.3593	.1103	-.3234	-.2398	-.2688		-.2366	-.2473					
70.000	-.2074	-.3010	-.1888	-.0656	-.3955	-.5971	-.2379								
90.000	-.1534	-.2291	-.1120	-.0345	-.4650	-.6093	-.2794								
105.000			-.0409	.0218	-.5853	-.6453	-.3308								
110.000								-.2021							
120.000	-.0838	-.0926	.0206	.1125	-.6803	-.7064	-.7053	-.2093							
135.000			.0967	.3608	-.5789	-.6295	-.6051								
150.000	-.0625	-.0219	.1301	.3168	-.4775	-.6093	-.4105								
165.000	-.0758		.1605		-.3078	-.5362	-.2288								
180.000	-.0926	-.0018	.1883	.1884											
320.000	.1140	.1613	.1601	-.4483	-.3105	-.3004	-.2638								

ORIGINAL PAGE IS  
OF POOR QUALITY

ARC11-019 IAB1 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB15)

ALPHA0( 7) = 5.304 BETA0 ( 1) = -4.072

SECTION ( 1) ORBITER FUSELAGE		DEPENDENT VARIABLE CP													
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.1801	.6987	.2242	.1095	.0933	.7664		-.4028		-.2130	-.1826	-.0988	-.0239	.0906	.1593
20.000			.2910	.1470	.1028	.2750		-.2513		-.2183					
40.000			.4581	.2138	.1367	.0588		-.3407		-.2085	-.2160	-.0709	.0110	.1186	.1926
55.000			.5241	.2845	.1783	.0290		-.1600		-.1732					
70.000			.5113	.2703	.1356	.0467		-.1106		-.1903	-.6142	-.1750	-.0604	.0208	
90.000		.6644	.4857	.2581	.1238	.0832		-.0556		-.1823	-.7022	-.2324	-.0744	.0061	
120.000			.4134	.2245	.1086	.1495		.1634		-.3065	-.6785	-.5119	-.1902	-.1065	
140.000										-.4104					
150.000			.2992	.1493	.0893	.1649				-.5761	-.7282	-.4933	-.1466	-.0359	
151.000									.2415						
156.000								.5753							
162.000									.2585						
165.000										-1.0420	-.7190	-.5776	-.1349	-.0291	
169.000								.5981							
174.000							.7639								
180.000	1.1801	.4452	.1892	.1238	.0769	.1526		.4842		-.7345	-.7301	-.5913	-.1148	-.0187	
305.000			.1554	.0110	-.0296	-.1775		-.4018		-.2912					
320.000			.2027	.0536	.0348	-.1136		-.2399		-.2674	-.2450	-.1622	-.0292	.0506	.1179
340.000			.2398	.0807	.0750	.1437		-.2899		-.2586					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1884	.2735	.4556	.0526	-.3317	-.2776	-.2753		-.2255	-.2136					
40.000	.1275	.1444	.1852	-.3382	-.4024	-.2700	-.2370		-.2124	-.2010					
70.000	-.2614	-.5056	-.1595	.0618	-.1865	-.4152	-.1540								
90.000	-.2165	-.4254	-.0677	.0740	-.2198	-.3863	-.1800								
105.000			.0547	.0866	-.3069	-.4091	-.1926								
110.000								-.2361							
120.000	-.2497	-.2334	.1691	.0703	-.4091	-.3886	-.2308	-.2048							
135.000			.1920	.1498	-.4347	-.3040	-.2518								
150.000	-.1195	-.0631	.1752	.1452	-.3253	-.2458	-.2396								
165.000	-.0985		.1477		-.0603	-.1957	-.2170								
180.000	-.0855	-.0413	.1244	.2908											
320.000	.1913	.2816	.3828	.0519	-.2730	-.2692	-.1995								

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## IABIA - PRESSURE SOURCE DATA TABULATION

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ARC11-019 IAB1 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB15)

ALPHA0( 7) = 5.305 BETA0( 2) = -2.036

SECTION ( 1) ORBITER FUSELAGE

DEPENDENT VARIABLE CP

X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.1965	.7120	.2351	.1186	.0925	.7339		-.4600		-.2056	-.1741	-.0940	-.0010	.0938	.1437
20.000			.2782	.1379	.0959	.2728		-.2776		-.1981					
40.000			.4034	.1797	.1046	.0295		-.4013		-.1996	-.2429	-.0891	.0073	.1065	.1824
55.000			.4435	.2165	.1107	-.0195		-.2185		-.2067					
70.000			.4269	.1994	.0725	-.0001		-.1657		-.2293	-.6904	-.2068	-.0647	.0197	
90.000		.5782	.4227	.1926	.0600	.0393		-.1054		-.2428	-.7378	-.2459	-.0628	.0103	
120.000			.3718	.1854	.0763	.1360		.1253		-.3795	-.7044	-.3846	-.1195	-.0435	
140.000										-.4925					
150.000			.2898	.1444	.0904	.1693			.2069	-.8813	-.7143	-.5143	-.1315	-.0075	
151.000															
156.000								.5500							
162.000									.2381						
165.000										-1.0312	-.6388	-.5313	-.1247	.0062	
169.000								.5975							
174.000							.7726								
180.000	1.1965	.4500	.2124	.1451	.0958	.1742		.5304		-1.1636	-.7333	-.4235	-.0157	.0160	
305.000			.2459	.0880	.0310	-.1201		-.3421		-.2486					
320.000			.2601	.0982	.0770	-.0544		-.2101		-.2368	-.2337	-.1272	-.0055	.0707	.1281
340.000			.2673	.0982	.0954	.1953		-.2846		-.2296					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1608	.2183	.3430	-.0366	-.3151	-.2698	-.2564		-.2185	-.2059					
40.000	.1209	.1304	.1093	-.3812	-.3420	-.2600	-.2306		-.2033	-.1999					
70.000	-.2484	-.4776	-.1749	.0305	-.2260	-.4397	-.1957								
90.000	-.1986	-.4006	-.0753	.0339	-.2825	-.4219	-.2880								
105.000			.0402	.0559	-.3655	-.4412	-.3632								
110.000								-.2302							
120.000	-.1785	-.1928	.1314	.0272	-.4768	-.4107	-.3898	-.2002							
135.000			.1594	.2460	-.4605	-.3214	-.3246								
150.000	-.0891	-.0643	.1503	.2623	-.3527	-.2819	-.2722								
165.000	-.0819		.1371		-.1371	-.2595	-.2158								
180.000	-.0712	-.0286		.3283											
320.000	.1664	.2526	.3430	.0253	-.2748	-.2283	-.1972								



ARC11-019 IAB1 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB15)

ALPHA0( 7) = 5.302 BETA0 ( 3) = .007

## SECTION ( 1) ORBITER FUSELAGE

## DEPENDENT VARIABLE CP

X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.1982	.7088	.2285	.1321	.0926	.6215		-.4037		-.2024	-.1496	-.0939	.0029	.0923	.1356
20.000			.2497	.1261	.0786	.2225		-.3548		-.1956					
40.000			.3297	.1352	.0661	-.0118		-.2398		-.2072	-.2419	-.1045	.0100	.0964	.1572
55.000			.3533	.1427	.0441	-.0730		-.2293		-.2332					
70.000			.3425	.1204	.0047	-.0547		-.2079		-.2694	-.7458	-.2032	-.0479	.0135	
90.000		.4796	.3425	.1238	-.0021	-.0118		-.1546		-.3062	-.7874	-.2423	-.0453	.0131	
120.000			.3220	.1514	.0359	.0978		.0753		-.4592	-.7645	-.3676	-.0668	-.0144	
140.000										-.5850					
150.000			.2663	.1435	.0826	.1537				-.9517	-.6533	-.4883	-.0178	.0090	
151.000									.1515						
156.000								.5094							
162.000									.1921						
165.000										-1.0323	-.7790	-.5286	.0123	.0178	
169.000								.5830							
174.000							.7413								
180.000	1.1982	.4457	.2219	.1469	.1063	.1843		.5511		-1.1793	-.8144	-.4018	-.0099	.0162	
305.000			.3347	.1529	.0937	-.0654		-.2410		-.2217					
320.000			.3175	.1317	.1082	-.0030		-.1722		-.2240	-.2249	-.1175	.0165	.0848	.1481
340.000			.2933	.1173	.1066	.2345		-.2742		-.2191					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1564	.1640	.1836	-.0877	-.3034	-.2673	-.2426		-.1959	-.1932					
40.000	.1288	.1424	.1305	-.1397	-.3246	-.2639	-.2263		-.1883	-.1861					
70.000	-.2459	-.4598	-.1833	.0091	-.2595	-.4715	-.1922								
90.000	-.1979	-.3793	-.0834	.0204	-.3325	-.4586	-.2403								
105.000			.0143	.0277	-.4380	-.4870	-.3517								
110.000															
120.000	-.1412	-.1584	.0707	.1268	-.5412	-.4745	-.4178	-.2317							
135.000			.1225	.3219	-.4783	-.3870	-.3479	-.1986							
150.000	-.0809	-.0474	.1498	.3934	-.3711	-.3529	-.2970								
165.000	-.0702		.1533		-.1775	-.3301	-.2085								
180.000	-.0672	-.0145	.1555	.3703											
320.000	.1412	.1752	.1783	-.0841	-.2733	-.2513	-.2070								

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## IA81A - PRESSURE SOURCE DATA TABULATION

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ARC11-019 IA81 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB15)

ALPHA0( 7) = 5.302 BETA0( 4) = 2.065

## SECTION ( 1) ORBITER FUSELAGE

## DEPENDENT VARIABLE CP

X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.1899	.7008	.2216	.1178	.0846	.7734		-.4379		-.1985	-.1530	-.1109	-.0138	.0738	.1276
20.000			.2185	.0954	.0561	.1672		-.3677		-.2113					
40.000			.2658	.0882	.0238	-.0520		-.2167		-.2188	-.2440	-.1326	-.0066	.0795	.1364
55.000			.2700	.0701	-.0183	-.1286		-.3127		-.2426					
70.000			.2611	.0488	-.0630	-.1034		-.2845		-.3056	-.7821	-.2020	-.0448	.0073	
90.000		.3710	.2661	.0530	-.0691	-.0593		-.2182		-.3625	-.8275	-.2402	-.0308	.0096	
120.000			.2661	.1000	-.0133	.0596		.0191		-.5389	-.8122	-.4206	-.0233	.0005	
140.000										-.6937					
150.000			.2410	.1235	.0523	.1298			.0923	-1.0221	-.7139	-.5025	.0119	.0156	
151.000															
156.000								.4564							
162.000									.1451						
165.000										-1.0366	-.8103	-.4070	.0039	.0122	
169.000								.5596							
174.000							.7216								
180.000	1.1899	.4282	.2201	.1430	.0948	.1713		.5457		-1.1785	-.8450	-.3991	.0020	.0095	
305.000			.4187	.2280	.1500	-.0125		-.1941		-.1778					
320.000			.3611	.1695	.1346	.0385		-.3810		-.1938	-.2225	-.0893	.0255	.0335	.1770
340.000			.2967	.1240	.1139	.2729		-.2792		-.2143					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1542	.1886	.2623	.0148	-.2809	-.2869	-.2803		-.2168	-.1959					
40.000	.1394	.2095	.2957	-.0084	-.2862	-.2433	-.2317		-.2232	-.2202					
70.000	-.2434	-.4311	-.1940	-.0198	-.3158	-.5282	-.2043								
90.000	-.1908	-.3482	-.1013	-.0068	-.3925	-.5194	-.2416								
105.000			-.0220	.0232	-.5173	-.5563	-.2864								
110.000								-.2282							
120.000	-.1140	-.1461	.0380	.1315	-.5901	-.5832	-.4024	-.2099							
135.000			.1144	.3402	-.4947	-.4996	-.3487								
150.000	-.0695	-.0406	.1475	.3603	-.3986	-.4840	-.2917								
165.000	-.0665		.1539		-.2159	-.4312	-.2034								
180.000	-.0737	-.0254	.1535	.3801											
320.000	.1312	.1427	.1117	-.3356	-.3059	-.2754	-.2635								

ORIGINAL PAGE IS  
OF POOR QUALITY

ARC11-019 IA81 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB15)

ALPHA0( 7) = 5.298 BETA0 ( 5) = 4.107

## SECTION ( 1) ORBITER FUSELAGE

## DEPENDENT VARIABLE CP

X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.1684	.6746	.1918	.0970	.0575	.7338		-.4353		-.2411	-.1900	-.1584	-.0430	.0437	.1066
20.000			.1658	.0574	.0148	.0932		-.3638		-.2415					
40.000			.1798	.0262	-.0306	-.1333		-.2405		-.2377	-.2638	-.1313	-.0275	.0623	.1208
55.000			.1778	-.0081	-.0851	-.2002		-.3494		-.2695					
70.000			.1689	-.0302	-.1232	-.1656		-.3418		-.3354	-.8257	-.1527	-.0684	.0032	
90.000		.2538	.1848	-.0176	-.1278	-.1199		-.2904		-.4108	-.8812	-.1972	-.0343	.0130	
120.000			.2043	.0452	-.0672	.0070		-.0513		-.6206	-.8781	-.3304	-.0128	.0066	
140.000										-.8844					
150.000			.2012	.0932	.0178	.0930				-1.0787	-.7778	-.5262	-.0044	.0147	
151.000									.0198						
156.000								.4003							
162.000									.0868						
165.000										-.9624	-.8341	-.5531	-.0101	.0055	
169.000								.5236							
174.000							.6723								
180.000	1.1684	.4026	.2140	.1284	.0793	.1541		.5259		-.7877	-.7644	-.5508	-.0029	-.0071	
305.000			.5035	.2911	.2119	.0314		-.1421		-.1460					
320.000			.3985	.1897	.1392	.0570		-.3509		-.1759	-.2227	-.0654	.0323	.1040	.1937
340.000			.2973	.1166	.0963	.2857		-.2911		-.2214					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1406	.2054	.3192	.0454	-.2868	-.2959	-.2790		-.2125	-.1877					
40.000	.1471	.2333	.3424	.0500	-.2941	-.2444	-.2405		-.2327	-.2198					
70.000	-.2411	-.3716	-.2097	-.0584	-.3721	-.5750	-.1970								
90.000	-.1893	-.2853	-.1258	-.0462	-.4468	-.5682	-.2332								
105.000			-.0664	-.0206	-.5664	-.6197	-.2614								
110.000								-.2251							
120.000	-.1087	-.1323	-.0244	.0922	-.6246	-.6509	-.4695	-.2174							
135.000			.1084	.2940	-.5293	-.5345	-.5221								
150.000	-.0755	-.0378	.1321	.3013	-.4473	-.5029	-.3958								
165.000	-.0766		.1355		-.2734	-.4537	-.2182								
180.000	-.0877	-.0263	.1428	.2914											
320.000	.1182	.1540	.1462	-.4647	-.3192	-.2786	-.2606								



ARC11-019 IAB1 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB16)

ALPHA0 ( 1 ) = -6.234 BETA0 ( 2 ) = -2.033

SECTION ( 1 ) ORBITER FUSELAGE		DEPENDENT VARIABLE CP													
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.3224	.7433	.3853	.3417	.3434	.8904		-.3954		-.0594	-.1757	-.1306	-.1375	-.0330	.0706
20.000			.4120	.3454	.3327	.5152		-.3924		-.0454					
40.000			.5267	.3541	.3112	.3026		-.3854		-.3779	-.0789	-.1987	-.2792	-.0279	.1221
55.000			.6044	.4079	.3293	.2523		-.0420		-.2248					
70.000			.6459	.4317	.3303	.2718		.0615		-.1291	-.5331	-.2806	-.2010	-.0811	
90.000		.8434	.6859	.4670	.3434	.3003		.1166		-.1071	-.4674	-.4684	-.1760	-.0847	
120.000			.7243	.5557	.4398	.4503		.3639		-.1046	-.3662	-.6242	-.1890	-.0978	
140.000										-.1336					
150.000			.7123	.5843	.5104	.5382				-.3923	-.5290	-.3531	-.2394	-.1317	
151.000									.5007						
156.000								.7937							
162.000									.5580						
165.000										-.4581	-.4299	-.2655	-.2474	-.1361	
169.000								.8678							
174.000						1.0079									
180.000	1.3224	.8924	.6616	.5781	.5223	.5551		.8238		-.5343	-.5510	-.2324	-.2661	-.1361	
305.000			.4517	.3273	.2890	.1944		-.2219		-.3340					
320.000			.4183	.3142	.3182	.2606		-.5390		-.1251	-.3180	-.1619	-.1639	-.0650	.0467
340.000			.4240	.3239	.3454	.4669		-.4623		-.0361					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1208	.2522	.4558	.1315	-.3907	-.3210	-.3379		-.2753	-.2907					
40.000	.0727	.1156	.1882	-.2872	-.3911	-.3382	-.3160		-.2659	-.2612					
70.000	.0636	.0167	.2299	.2858	.0473	-.1447	-.3055								
90.000	.0806	.0803	.2864	.2854	.0029	-.1101	-.2086								
105.000			.3563	.2777	-.0852	-.1400	-.2193								
110.000								-.3903							
120.000	.0803	.1969	.4101	.2211	-.1289	-.1493	-.2005	-.3149							
135.000			.4884	.4769	-.0402	-.0328	-.0928								
150.000	.0742	.2601	.5008	.5098	.0754	.0352	-.0733								
165.000	.0708		.4928		.2833	.0965	-.2984								
180.000	.0712	.2716	.4837	.6570											
320.000	.0772	.2635	.4161	.1676	-.2901	-.2813	-.2923								

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## 1A81A - PRESSURE SOURCE DATA TABULATION

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ARC11-019 1A81 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB16)

ALPHA0( 1) = -6.194 BETA0( 3) = .038

## SECTION ( 1) ORBITER FUSELAGE

## DEPENDENT VARIABLE CP

X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.3232	.7425	.3816	.3423	.3375	.8119		-.4161		-.0770	-.1734	-.1521	-.1727	-.0594	.0560
20.000			.3947	.3353	.3203	.4790		-.3926		-.0428					
40.000			.4775	.3285	.2886	.2918		-.4301		-.4224	-.1058	-.1951	-.3158	-.0604	.0999
55.000			.5387	.3578	.2836	.2176		-.0897		-.2848					
70.000			.5735	.3723	.2758	.2294		.0159		-.1864	-.5879	-.3292	-.2347	-.1090	
90.000		.7525	.6140	.4040	.2795	.2505		.0697		-.1724	-.5276	-.5333	-.2056	-.1114	
120.000			.6667	.5051	.3895	.4028		.3074		-.1788	-.4335	-.6716	-.2603	-.1305	
140.000										-.2925					
150.000			.6852	.5658	.4896	.5122				-.4365	-.5357	-.3329	-.2768	-.1309	
151.000									.4475						
156.000								.7517							
162.000									.5171						
165.000										-.4629	-.4846	-.2488	-.2781	-.1299	
169.000								.8499							
174.000							.9788								
180.000	1.3232	.8850	.6660	.5792	.5253	.5569		.8386		-.4707	-.5635	-.2297	-.2751	-.1295	
305.000			.5105	.3649	.3194	.2137		-.1813		-.2935					
320.000			.4485	.3247	.3265	.2849		-.4980		-.0507	-.3519	-.1452	-.2016	-.0587	.0668
340.000			.4337	.3264	.3470	.4928		-.4468		-.0233					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1161	.1873	.2846	.0750	-.3605	-.3334	-.3169		-.2835	-.2984					
40.000	.0864	.1292	.1617	-.1696	-.3787	-.3355	-.3115		-.2720	-.2673					
70.000	.0597	.0799	.2291	.2754	.0298	-.1711	-.3307								
90.000	.0725	.1319	.2766	.2902	-.0376	-.1495	-.2359								
105.000			.3375	.2258	-.1212	-.1762	-.2521								
110.000								-.4343							
120.000	.0765	.2149	.3773	.1690	-.1903	-.2072	-.2624	-.3404							
135.000			.4663	.4795	-.0884	-.0966	-.1445								
150.000	.0698	.2752	.4900	.5371	.0365	-.0304	-.1259								
165.000	.0678		.4943		.2315	.0286	-.3049								
180.000	.0657	.2850	.4937	.6797											
320.000	.0732	.1708	.2622	-.0416	-.3068	-.3084	-.3117								

ORIGINAL PAGE IS  
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ARC11-019 1A81 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB16)

ALPHA0( 1) = -6.181 BETA0 ( 4) = 2.103

SECTION ( 1) ORBITER FUSELAGE		DEPENDENT VARIABLE CP													
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.3182	.7369	.3757	.3286	.3221	.9289		-.4276		-.0850	-.2402	-.1546	-.1693	-.0756	.0488
20.000			.3726	.3134	.3015	.4449		-.4316		-.0743					
40.000			.4289	.2972	.2661	.2573		-.4801		-.2604	-.1556	-.2057	-.3379	-.0585	.0839
55.000			.4739	.3040	.2404	.1855		-.1346		-.3250					
70.000			.5038	.3090	.2229	.1953		-.0272		-.2336	-.6339	-.3968	-.2499	-.1118	
90.000		.6593	.5457	.3380	.2259	.2089		.0267		-.2263	-.5797	-.5848	-.2181	-.1155	
120.000			.6114	.4484	.3336	.3581		.2488		-.2487	-.4838	-.7149	-.3692	-.1486	
140.000										-.4247					
150.000			.6492	.5398	.4609	.4851				-.4799	-.5475	-.2894	-.3153	-.1500	
151.000									.3946						
156.000									.7088						
162.000									.4770						
165.000										-.4559	-.5506	-.2429	-.2888	-.1419	
169.000								.9302							
174.000							.9646								
180.000	1.3182	.8698	.6653	.5737	.5184	.5485		.8346		-.5398	-.5506	-.2332	-.2667	-.1409	
305.000			.5753	.4082	.3520	.2399		-.1192		-.2385					
320.000			.4757	.3363	.3292	.2992		-.4479		-.2558	-.3402	-.1094	-.2885	-.0120	.1021
340.000			.4372	.3238	.3387	.5185		-.4690		-.0229					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1207	.1992	.3010	.0989	-.3289	-.3405	-.3246		-.2838	-.2773					
40.000	.0950	.1722	.3145	.0648	-.4351	-.3091	-.3114		-.2814	-.2831					
70.000	.0761	.1029	.2200	.2752	.0135	-.1857	-.3502								
90.000	.0914	.1553	.2682	.2871	-.0481	-.1810	-.2652								
105.000			.3114	.2026	-.1489	-.2032	-.2814								
110.000								-.3939							
120.000	.0955	.2169	.3428	.1143	-.2460	-.2672	-.3250	-.3480							
135.000			.4374	.4571	-.1307	-.1592	-.1916								
150.000	.0817	.2676	.4671	.5656	-.0042	-.1015	-.1791								
165.000	.0705		.4762		.1910	-.0303	-.2953								
180.000	.0621	.2824	.4860	.6752											
320.000	.0779	.1538	.1800	-.2247	-.3445	-.3283	-.3233								

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## IA81A - PRESSURE SOURCE DATA TABULATION

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ARC11-019 IA81 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB16)

ALPHA0 ( 1 ) = -6.169 BETA0 ( 5 ) = 4.159

## SECTION ( 1 ) ORBITER FUSELAGE

## DEPENDENT VARIABLE CP

X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.3050	.7167	.3538	.3108	.3057	.9219		-.4323		-.1157	-.2601	-.1941	-.1561	-.0931	.0283
20.000			.3352	.2842	.2754	.3967		-.4731		-.0996					
40.000			.3668	.2579	.2363	.2095		-.5284		-.2108	-.2080	-.2571	-.3471	-.0521	.0634
55.000			.4008	.2467	.1992	.1564		-.1793		-.3797					
70.000			.4287	.2457	.1752	.1656		-.0701		-.2805	-.6705	-.4457	-.2494	-.0974	
90.000		.5538	.4710	.2680	.1692	.1656		-.0182		-.2782	-.6241	-.6185	-.2368	-.1101	
120.000			.5452	.3877	.2706	.3053		.1345		-.3156	-.5239	-.7272	-.4865	-.1731	
140.000										-.4914					
150.000			.6071	.5078	.4243	.4515				-.5134	-.5560	-.2851	-.3365	-.1837	
151.000									.3352						
156.000								.6658							
162.000									.4300						
165.000										-.4223	-.5824	-.2471	-.2878	-.1986	
169.000								.7982							
174.000							.9433								
180.000	1.3050	.8477	.6549	.5681	.5086	.5409		.8173		-.5923	-.4592	-.2478	-.2518	-.2000	
305.000			.6397	.4535	.3899	.2700		-.0641		-.1772					
320.000			.4953	.3412	.3322	.3162		-.3991		-.2381	-.3200	-.0357	-.3768	.0324	.1330
340.000			.4325	.3152	.3264	.5375		-.5036		.0097					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1080	.2103	.3503	.1644	-.3365	-.3490	-.3275		-.2871	-.2800					
40.000	.1097	.2130	.4023	.1732	-.5008	-.3047	-.3160		-.2877	-.2844					
70.000	.0969	.1107	.1978	.2818	-.0145	-.2092	-.3819								
90.000	.1073	.1613	.2464	.2795	-.0519	-.2116	-.3022								
105.000			.2866	.1995	-.1883	-.2312	-.3113								
110.000								-.3920							
120.000	.1097	.2076	.3031	.0321	-.3162	-.3498	-.3879	-.3306							
135.000			.3996	.4321	-.1819	-.2249	-.2539								
150.000	.0965	.2495	.4343	.5792	-.0516	-.1685	-.2404								
165.000	.0786		.4492		.1465	-.0838	-.3015								
180.000	.0675	.2623	.4704	.6147											
320.000	.0749	.1658	.1840	-.3172	-.3685	-.3636	-.3636								



ARC11-019 IAB1 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB16)

ALPHA0 ( 2 ) = -4.136 BETA0 ( 1 ) = -6.157

SECTION ( 1 ) ORBITER FUSELAGE				DEPENDENT VARIABLE CP												
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740	
PHI																
.000	1.2901	.7388	.3523	.2985	.3048	.9248		-.3885		-.1732	-.1688	-.3134	-.3246	.0344	.1262	
20.000			.4157	.3240	.3055	.5573		-.3567		-.1982						
40.000			.6014	.3783	.3196	.3361		-.2872		-.1649	-.2308	-.0947	-.2624	-.0251	.1874	
55.000			.7178	.4974	.3958	.3100		.0512		-.0884						
70.000			.7600	.5296	.4089	.3347		.1450		-.0095	-.3761	-.1884	-.1718	-.0622		
90.000		.9764	.7802	.5598	.4233	.3677		.2075		.0211	-.3721	-.2982	-.1688	-.0752		
120.000			.7654	.5924	.4745	.4912		.4502		.0279	-.2828	-.5421	-.1946	-.1184		
140.000										.0023						
150.000			.6815	.5347	.4742	.5130				-.1675	-.5972	-.3977	-.2227	-.1857		
151.000									.5623							
156.000								.8368								
162.000									.5952							
165.000										-.4743	-.5342	-.3917	-.2498	-.2234		
169.000								.8618								
174.000						.9897										
180.000	1.2901	.8203	.5623	.4854	.4396	.4834		.7358		-.6020	-.4637	-.3433	-.2896	-.2597		
305.000			.2927	.2064	.1946	.1029		-.3138		-.4279						
320.000			.3220	.2299	.2482	.1425		-.6742		-.1557	-.3040	-.1886	-.1782	-.1067	.0318	
340.000			.3720	.2618	.2981	.3867		-.4859		-.0459						
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450						
PHI																
.000	.1649	.3376	.5724	.2230	-.3873	-.3244	-.3517		-.2743	-.2776						
40.000	.0765	.1345	.2423	-.1752	-.4712	-.3559	-.3665		-.2602	-.2541						
70.000	.0217	-.1461	.1078	.2883	.0911	-.1078	-.2771									
90.000	.0359	-.0906	.1942	.3017	.0643	-.0823	-.1813									
105.000			.2954	.3226	-.0260	-.1068	-.1807									
110.000								-.3673								
120.000	-.0122	-.0240	.4245	.3454	-.0712	-.0734	-.1212	-.2631								
135.000			.4820	.4538	-.0249	.0388	-.0441									
150.000	.0124	.1276	.4746	.4400	.0839	.1195	-.0267									
165.000	.0312		.4393		.3575	.1954	-.2678									
180.000	.0342	.1912	.4040	.4863												
320.000	.1547	.3945	.5503	.3169	-.2972	-.3262	-.2994									

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## IABIA - PRESSURE SOURCE DATA TABULATION

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ARC11-019 IAB1 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB16)

ALPHA0( 2) = -4.125 BETA0 ( 2) = -4.102

SECTION ( 1) ORBITER FUSELAGE

DEPENDENT VARIABLE CP

X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.3033	.7444	.3657	.3107	.3142	.9123		-.3987		-.0609	-.1994	-.1431	-.2764	-.0098	.1028
20.000			.4127	.3235	.3081	.5326		-.4011		-.0739					
40.000			.5618	.3554	.3027	.3114		-.3440		-.3335	-.0382	-.1519	-.2426	-.0523	.1560
55.000			.6585	.4401	.3464	.2703		-.0051		-.1564					
70.000			.6948	.4667	.3535	.2921		.0920		-.0790	-.4832	-.2290	-.2024	-.0871	
90.000		.8987	.7219	.4986	.3689	.3254		.1574		-.0483	-.4263	-.3349	-.1624	-.0941	
120.000			.7260	.5551	.4395	.4564		.4015		-.0412	-.3271	-.5942	-.1944	-.1172	
140.000										-.0766					
150.000			.6763	.5356	.4724	.5104				-.3691	-.5951	-.4008	-.2275	-.1676	
151.000									.5240						
156.000								.8105							
162.000									.5703						
165.000										-.4797	-.4704	-.3794	-.2629	-.1875	
169.000								.8552							
174.000							.9925								
180.000	1.3033	.8305	.5848	.5076	.4592	.5013		.7721		-.5937	-.5136	-.3058	-.2987	-.1945	
305.000			.3644	.2537	.2275	.1394		-.2826		-.3893					
320.000			.3685	.2651	.2737	.1964		-.6362		-.1363	-.2982	-.1837	-.1743	-.0696	.0378
340.000			.3971	.2853	.3094	.4171		-.5180		-.0517					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1641	.3228	.5512	.2141	-.3866	-.3176	-.3386			-.2631	-.2809				
40.000	.0772	.1424	.2483	-.1693	-.4492	-.3431	-.3319			-.2590	-.2493				
70.000	.0267	-.1386	.1460	.2760	.0613	-.1324	-.3013								
90.000	.0498	-.0750	.2167	.2814	.0296	-.1045	-.2046								
105.000			.2985	.2911	-.0658	-.1344	-.2124								
110.000								-.3654							
120.000	.0310	.0518	.4085	.3097	-.1123	-.1238	-.1679	-.2729							
135.000			.4781	.4587	-.0518	-.0164	-.0814								
150.000	.0381	.1918	.4741	.4553	.0578	.0597	-.0629								
165.000	.0441		.4522		.3051	.1240	-.2793								
190.000	.0455	.2261	.4300	.5149											
320.000	.1370	.3573	.4986	.2482	-.2894	-.2848	-.2884								

ARC11-019 IAB1 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB16)

ALPHA0( 2) = -4.108 BETA0 ( 3) = .014

SECTION ( 1) ORBITER FUSELAGE

DEPENDENT VARIABLE CP

X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.3124	.7471	.3654	.3140	.3117	.7929		-.4258		-.0810	-.1747	-.1325	-.1483	-.0446	.0678
20.000			.3798	.3086	.2955	.4683		-.4134		-.0483					
40.000			.4686	.3049	.2665	.2796		-.4344		-.3429	-.1069	-.1595	-.2975	-.0436	.1133
55.000			.5256	.3362	.2605	.2024		-.0937		-.2734					
70.000			.5592	.3487	.2494	.2137		.0092		-.1786	-.5822	-.3226	-.2550	-.1101	
90.000		.7296	.5914	.3776	.2571	.2381		.0673		-.1605	-.5329	-.5216	-.2182	-.1125	
120.000			.6357	.4715	.3527	.3816		.3041		-.1818	-.4370	-.6785	-.2409	-.1185	
140.000										-.2902					
150.000			.6387	.5177	.4404	.4795				-.4633	-.5629	-.3861	-.2968	-.1229	
151.000									.4363						
156.000								.7383							
162.000									.5001						
165.000										-.4819	-.5103	-.2894	-.3035	-.1219	
169.000								.8311							
174.000							.9595								
180.000	1.3124	.8318	.6164	.5274	.4727	.5196		.8151		-.5072	-.5839	-.2700	-.3011	-.1206	
305.000			.5019	.3436	.2939	.1997		-.1846		-.2767					
320.000			.4399	.3032	.2997	.2745		-.5009		-.0255	-.3428	-.1218	-.1884	-.0468	.0789
340.000			.4187	.3012	.3190	.4843		-.4544		-.0377					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1298	.2015	.2821	.0777	-.3529	-.3199	-.3083		-.2722	-.2873					
40.000	.1038	.1493	.1743	-.1194	-.3707	-.3243	-.2972		-.2580	-.2563					
70.000	.0341	-.0656	.1777	.2430	.0111	-.1739	-.3340								
90.000	.0573	.0092	.2373	.2380	-.0491	-.1524	-.2497								
105.000			.3036	.2157	-.1339	-.1854	-.2642								
110.000								-.3838							
120.000	.0644	.1501	.3380	.1060	-.1864	-.2207	-.2726	-.3245							
135.000			.4222	.4171	-.1026	-.1213	-.1631								
150.000	.0701	.2184	.4457	.4719	.0101	-.0617	-.1480								
165.000	.0738		.4491		.2173	-.0037	-.2928								
180.000	.0711	.2252	.4494	.6189											
320.000	.0998	.1915	.2713	-.0162	-.2896	-.3104	-.2915								

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## 1A81A - PRESSURE SOURCE DATA TABULATION

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ARC11-019 1A81 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB16)

ALPHA( 2) = -4.082 BETA( 4) = 4.132

SECTION ( 1) ORBITER FUSELAGE		DEPENDENT VARIABLE CP													
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.2929	.7208	.3394	.2851	.2779	.9022		-.4623		-.1381	-.2628	-.1850	-.1869	-.1000	.0390
20.000			.3215	.2547	.2447	.3753		-.4982		-.1214					
40.000			.3498	.2311	.2056	.1811		-.5486		-.1979	-.2075	-.2481	-.2559	-.0553	.0733
55.000			.3797	.2189	.1647	.1241		-.2010		-.3922					
70.000			.4046	.2125	.1397	.1376		-.0895		-.2908	-.6823	-.4468	-.3168	-.1054	
90.000		.5187	.4425	.2388	.1346	.1458		-.0308		-.2845	-.6432	-.6492	-.2824	-.1084	
120.000			.5062	.3470	.2295	.2764		.1754		-.3294	-.5483	-.7740	-.4403	-.1484	
140.000										-.5154					
150.000			.5562	.4552	.3715	.4108				-.5585	-.5971	-.3494	-.3861	-.1887	
151.000									.3156						
156.000								.6432							
162.000									.4042						
165.000										-.4923	-.6198	-.3104	-.3391	-.1992	
169.000								.7732							
174.000							.9200								
30.000	1.2929	.7908	.5986	.5113	.4514	.4937		.7876		-.6216	-.5127	-.3168	-.2994	-.2155	
305.000			.6272	.4377	.3660	.2556		-.0771		-.1732					
320.000			.4931	.3245	.3060	.3013		-.4076		-.1882	-.3237	-.0446	-.3912	.0431	.1343
340.000			.4207	.2904	.2974	.5213		-.5251		-.0045					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1251	.2297	.3510	.1630	-.3193	-.3234	-.3135		-.2702	-.2665					
40.000	.1248	.2541	.4251	.2097	-.4796	-.2849	-.3027		-.2729	-.2712					
70.000	.0472	.0363	.1574	.2438	-.0318	-.2197	-.3911								
90.000	.0746	.0976	.2118	.2435	-.0744	-.2305	-.3281								
105.000			.2653	.1863	-.1978	-.2443	-.3308								
110.000								-.3600							
120.000	.0807	.1682	.2758	.0058	-.3048	-.3464	-.3912	-.3238							
135.000			.3646	.3849	-.1923	-.2444	-.2717								
150.000	.0766	.2135	.3971	.4905	-.0723	-.1957	-.2676								
165.000	.0681		.4113		.1346	-.1137	-.2981								
180.000	.0566	.2179	.4312	.5365											
320.000	.0942	.1756	.1914	-.3023	-.3366	-.3484	-.3465								

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OF POOR QUALITY

ARC11-019 IA81 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB16)

ALPHA0( 2) = -4.074 BETA0( 5) = 6.189

## SECTION ( 1) ORBITER FUSELAGE

## DEPENDENT VARIABLE CP

X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.2736	.7110	.3232	.2689	.2544	.8607		-.4320		-.1425	-.3726	-.1853	-.1348	-.1630	-.0086
20.000			.2894	.2247	.2210	.3294		-.5001		-.1790					
40.000			.2932	.1916	.1740	.1348		-.5932		-.1814	-.2534	-.2923	-.3497	-.0669	.0580
55.000			.3111	.1652	.1247	.0918		-.2404		-.4290					
70.000			.3345	.1565	.0933	.1099		-.1214		-.3238	-.7143	-.4935	-.3208	-.0672	
90.000		.4168	.3744	.1767	.0798	.1113		-.0548		-.3241	-.6808	-.6816	-.2983	-.0938	
120.000			.4412	.2868	.1678	.2370		.1209		-.3824	-.5795	-.7870	-.5378	-.1529	
140.000										-.5711					
150.000			.5004	.4118	.3246	.3723			.2546	-.5826	-.6215	-.3531	-.3951	-.2432	
151.000															
156.000								.5884							
162.000									.3575						
165.000										-.4749	-.6175	-.3269	-.3316	-.2844	
169.000								.7398							
174.000							.8798								
180.000	1.2736	.7454	.5702	.4827	.4252	.4715		.7589		-.6331	-.4823	-.3652	-.2815	-.2658	
305.000			.6972	.4939	.4136	.2926		-.0145		-.0661					
320.000			.5246	.3395	.3158	.3175		-.3493		-.0881	-.2981	-.0313	-.3826	.0699	.1574
340.000			.4246	.2845	.2864	.5373		-.5061		.0498					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.0895	.2166	.3467	.1372	-.3097	-.3320	-.3217		-.2734	-.2656					
40.000	.1317	.2980	.4859	.3109	-.4764	-.2931	-.3184		-.2856	-.2778					
70.000	.0496	.0546	.1460	.2565	-.0431	-.2327	-.4077								
90.000	.0756	.1104	.1997	.2517	-.0785	-.2260	-.3363								
105.000			.2517	.1960	-.2155	-.2631	-.3522								
110.000								-.3478							
120.000	.0766	.1717	.2541	-.0552	-.3600	-.4063	-.4361	-.3146							
135.000			.3200	.3599	-.2354	-.3025	-.3275								
150.000	.0577	.1970	.3565	.5135	-.1224	-.2636	-.3211								
165.000	.0408		.3785		.0872	-.1658	-.3048								
180.000	.0222	.1855	.4089	.5064											
320.000	.0949	.1892	.1940	-.3110	-.3455	-.3904	-.3854								

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## IAB1A - PRESSURE SOURCE DATA TABULATION

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ARC11-019 IAB1 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB16)

ALPHA0( 3) = -2.033 BETA0( 1) = -6.165

SECTION ( 1) ORBITER FUSELAGE

DEPENDENT VARIABLE CP

X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.2791	.7442	.3399	.2703	.2758	.9085		-.4146		-.1798	-.1846	-.3039	-.2965	.0349	.1387
20.000			.4078	.2991	.2775	.5416		-.3860		-.2029					
40.000			.5989	.3599	.2981	.3178		-.3025		-.1420	-.0418	-.0897	-.2598	-.0343	.1949
55.000			.7126	.4763	.3715	.2887		.0367		-.0910					
70.000			.7436	.5020	.3742	.3099		.1278		-.0143	-.3843	-.1700	-.1862	-.0716	
90.000		.9504	.7540	.5243	.3836	.3414		.1942		.0175	-.3894	-.3012	-.2003	-.0891	
120.000			.7195	.5409	.4179	.4472		.4338		.0067	-.3039	-.5412	-.2319	-.1647	
140.000										-.0319					
150.000			.6220	.4702	.4107	.4639				-.2257	-.6430	-.4552	-.2557	-.2292	
151.000									.5416						
156.000								.8172							
162.000									.5701						
165.000										-.5117	-.5884	-.4424	-.2863	-.2617	
169.000								.8360							
174.000							.9655								
180.000	1.2791	.7625	.5021	.4238	.3779	.4336		.7059		-.6375	-.5172	-.4010	-.3280	-.2746	
305.000			.2675	.1724	.1541	.0764		-.3471		-.4533					
320.000			.3021	.2025	.2122	.1119		-.7063		-.1768	-.3111	-.2054	-.1882	-.0817	.0524
340.000			.3542	.2336	.2675	.3697		-.5114		-.0662					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1891	.3536	.5760	.2302	-.3904	-.3234	-.3453		-.2690	-.2697					
40.000	.0974	.1629	.2585	-.1521	-.4779	-.3609	-.3686		-.2548	-.2565					
70.000	-.0248	-.1798	-.1511	.2434	.0591	-.1317	-.3219								
90.000	.0035	-.1223	.0708	.2528	.0307	-.1125	-.2285								
105.000			.2277	.2731	-.0564	-.1459	-.2302								
110.000								-.3563							
120.000	-.0431	-.0790	.3752	.2846	-.0980	-.1246	-.1520	-.2762							
135.000			.4353	.3866	-.0794	-.0204	-.0793								
150.000	.0113	.0529	.4255	.3812	.0258	.0737	-.0607								
165.000	.0269		.3938		.3282	.1549	-.2738								
180.000	.0316	.1347	.3620	.4258											
320.000	.2099	.4137	.5594	.3292	-.3001	-.3138	-.2941								

ARC11-019 IAB1 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB16)

ALPHA( 3) = -2.021 BETA( 2) = -2.073

## SECTION ( 1) ORBITER FUSELAGE

## DEPENDENT VARIABLE CP

X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.3025	.7517	.3482	.2744	.2769	.8732		-.4352		-.0845	-.1683	-.1408	-.1290	-.0249	.0871
20.000			.3816	.2811	.2654	.4907		-.4534		-.0427					
40.000			.5049	.3007	.2479	.2705		-.4034		-.3649	-.0829	-.1436	-.2727	-.0319	.1416
55.000			.5818	.3635	.2712	.2126		-.0617		-.2170					
70.000			.6072	.3787	.2607	.2305		.0382		-.1354	-.5349	-.2474	-.2328	-.1052	
90.000		.7912	.6303	.4054	.2715	.2597		.1022		-.1056	-.4940	-.3699	-.2245	-.1086	
120.000			.6426	.4652	.3452	.3888		.3478		-.1249	-.3938	-.6517	-.2143	-.1383	
140.000										-.1784					
150.000			.6079	.4659	.3973	.4548				-.4507	-.6353	-.4456	-.2709	-.1493	
151.000									.4680						
156.000								.7603							
162.000									.5175						
165.000										-.5110	-.5082	-.3809	-.3060	-.1392	
169.000								.8229							
174.000							.9649								
180.000	1.3025	.7740	.5447	.4637	.4055	.4651		.7737		-.6132	-.6137	-.3280	-.3331	-.1284	
305.000			.4121	.2644	.2187	.1433		-.2560		-.3257					
320.000			.3808	.2479	.2473	.2179		-.5738		-.1042	-.2903	-.1440	-.1460	-.0472	.0661
340.000			.3804	.2577	.2801	.4361		-.5209		-.0677					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1571	.2791	.4548	.1298	-.3816	-.3298	-.3147		-.2605	-.2655					
40.000	.1108	.1568	.2021	-.2812	-.3597	-.3439	-.3299		-.2514	-.2449					
70.000	.0002	-.1612	.0656	.2216	.0083	-.1700	-.3444								
90.000	.0304	-.0997	.1460	.2135	-.0339	-.1504	-.2599								
105.000			.2376	.2088	-.1254	-.1855	-.2640								
110.000								-.3610							
120.000	.0351	.0379	.3383	.2122	-.1646	-.2042	-.2318	-.3232							
135.000			.4065	.3833	-.1032	-.1041	-.1477								
150.000	.0584	.1788	.4072	.4016	.0037	-.0359	-.1339								
165.000	.0669		.4031		.2461	.0300	-.2972								
180.000	.0726	.2025	.3964	.4981											
320.000	.1513	.3200	.4433	.2007	-.2974	-.2802	-.2807								

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## 1A81A - PRESSURE SOURCE DATA TABULATION

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ARC11-019 1A81 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB16)

ALPHA0( 3) = -2.004 BETA0( 3) = 2.061

SECTION ( 1) ORBITER FUSELAGE				DEPENDENT VARIABLE CP											
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.3066	.7460	.3331	.2669	.2649	.8975		-.4621		-.1106	-.1494	-.1630	-.1500	-.0600	.0773
20.000			.3320	.2473	.2382	.4134		-.4876		-.0938					
40.000			.3918	.2379	.1994	.2170		-.5063		-.1836	-.1355	-.1697	-.2232	-.0332	.1118
55.000			.4365	.2480	.1717	.1393		-.1582		-.3281					
70.000			.4599	.2500	.1511	.1488		-.0503		-.2346	-.6329	-.3798	-.2947	-.1205	
90.000		.6016	.4933	.2773	.1552	.1696		.0147		-.2205	-.5963	-.5757	-.2517	-.1201	
120.000			.5380	.3739	.2487	.3050		.2389		-.2639	-.5120	-.7372	-.2843	-.1195	
140.000										-.4435					
150.000			.5534	.4390	.3565	.4096				-.5513	-.6075	-.3961	-.3642	-.1201	
151.000									.3639						
156.000								.6752							
162.000									.4363						
165.000										-.5201	-.6133	-.3360	-.3541	-.1256	
169.000								.7888							
174.000						.9258									
180.000	1.3066	.7598	.5531	.4687	.4093	.4635		.7871		-.6227	-.6122	-.3266	-.3320	-.1337	
305.000			.5583	.3681	.3033	.2126		-.1361		-.2145					
320.000			.4532	.2871	.2767	.2794		-.4551		-.1440	-.3334	-.0761	-.1591	.0056	.1206
340.000			.4036	.2655	.2777	.5014		-.5338		-.0318					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1599	.2393	.3241	.1325	-.2969	-.3050	-.2942		-.2559	-.2468					
40.000	.1494	.2522	.3630	.1430	-.4435	-.2753	-.2895		-.2593	-.2620					
70.000	-.0008	-.0857	.1315	.2153	-.0222	-.2069	-.3717								
90.000	.0341	-.0031	.1920	.2109	-.0778	-.2008	-.3017								
105.000			.2636	.1994	-.1681	-.2268	-.3135								
110.000								-.3599							
120.000	.0564	.1309	.2886	.0483	-.2285	-.2929	-.3359	-.3237							
135.000			.3636	.3763	-.1543	-.2015	-.2381								
150.000	.0706	.1944	.3873	.4218	-.0475	-.1562	-.2377								
165.000	.0702		.3941		.1646	-.0862	-.2631								
180.000	.0669	.2008	.3998	.5195											
320.000	.1294	.1944	.2092	-.1971	-.3104	-.3260	-.3076								

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ARC11-019 IAB1 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB16)

ALPHAO( 3) = -1.987 BETA0 ( 4) = 6.166

## SECTION ( 1) ORBITER FUSELAGE

## DEPENDENT VARIABLE CP

X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.2633	.7135	.3051	.2374	.2237	.8399		-.4581		-.1577	-.3604	-.1775	-.0845	-.1705	.0175
20.000			.2675	.1918	.1862	.3084		-.5196		-.2094					
40.000			.2679	.1600	.1379	.1076		-.6140		-.1883	-.2405	-.2736	-.2163	-.0384	.0816
55.000			.2851	.1333	.0842	.0605		-.2573		-.4367					
70.000			.3079	.1238	.0497	.0799		-.1387		-.3309	-.7241	-.4926	-.3444	-.0327	
90.000		.3806	.3458	.1441	.0393	.0898		-.0749		-.3252	-.6926	-.6807	-.3132	-.0512	
120.000			.4042	.2482	.1243	.2113		.1145		-.3937	-.6063	-.8108	-.4403	-.1043	
140.000										-.5904					
150.000			.4514	.3578	.2702	.3331				-.6183	-.6607	-.3976	-.4218	-.2022	
151.000									.2383						
156.000									.5747						
162.000									.3383						
165.000										-.5395	-.6583	-.3707	-.3587	-.2442	
169.000								.7211							
174.000							.8510								
180.000	1.2633	.6876	.5122	.4248	.3658	.4263		.7362		-.6563	-.5215	-.4141	-.3086	-.2805	
305.000			.6902	.4768	.3891	.2799		-.0218		-.0407					
320.000			.5211	.3200	.2941	.3065		-.3484		-.0859	-.2987	.0076	-.3684	.0891	.1627
340.000			.4122	.2568	.2569	.5270		-.5286		.0350					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1155	.2354	.3607	.1338	-.2932	-.3221	-.3150		-.2661	-.2346					
40.000	.1701	.3367	.5032	.3348	-.4596	-.2778	-.3093		-.2735	-.2634					
70.000	.0172	-.0441	.1079	.2231	-.0583	-.2392	-.4177								
90.000	.0578	.0294	.1630	.2258	-.1040	-.2422	-.3503								
105.000			.2277	.1971	-.2184	-.2683	-.3594								
110.000								-.3467							
120.000	.0622	.1285	.2372	-.0455	-.3285	-.3910	-.4351	-.3175							
135.000			.2850	.3085	-.2412	-.3113	-.3379								
150.000	.0616	.1624	.3131	.4516	-.1435	-.2852	-.3341								
165.000	.0480		.3375		.0760	-.1964	-.3020								
180.000	.0351	.1397	.3696	.4520											
320.000	.1219	.2104	.2066	-.3013	-.3227	-.3757	-.3846								

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## IABIA - PRESSURE SOURCE DATA TABULATION

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ARC11-019 IAB1 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB16)

ALPHA0 (4) = .070 BETA0 (1) = -6.166

SECTION (1) ORBITER FUSELAGE				DEPENDENT VARIABLE CP											
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.2725	.7610	.3334	.2567	.2625	.9041		-.4271		-.1650	-.1740	-.1865	-.2695	.0457	.1665
20.000			.4049	.2894	.2632	.5408		-.4192		-.2160					
40.000			.5988	.3570	.2838	.3152		-.3049		-.1563	.0068	-.0715	-.1678	-.0394	.2235
55.000			.7064	.4687	.3546	.2802		.0291		-.0935					
70.000			.7277	.4864	.3495	.2912		.1221		-.0143	-.3723	-.1530	-.1577	-.0931	
90.000		.9318	.7294	.5007	.3515	.3222		.1901		.0224	-.3937	-.2869	-.1965	-.0988	
120.000			.6792	.4976	.3764	.4097		.4291		.0020	-.3151	-.5425	-.2607	-.2084	
140.000										-.0466					
150.000			.5713	.4203	.3590	.4216				-.2371	-.6685	-.5034	-.2738	-.2477	
151.000									.5253						
156.000								.8085							
162.000									.5537						
165.000										-.5324	-.6201	-.4682	-.3063	-.2666	
169.000								.8261							
174.000						.9483									
180.000	1.2725	.7171	.4469	.3741	.3325	.3964		.6948		-.6466	-.5531	-.4301	-.3512	-.2430	
305.000			.2544	.1560	.1129	.0540		-.3495		-.4506					
320.000			.2991	.1874	.2068	.0982		-.7130		-.1814	-.2769	-.1995	-.1662	-.0593	.0863
340.000			.3496	.2187	.2618	.3634		-.5216		-.0621					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.2272	.3747	.5871	.2474	-.3729	-.3130	-.3210		-.2538	-.2501					
40.000	.1389	.1951	.2898	-.1230	-.4651	-.3662	-.3584		-.2376	-.2363					
70.000	-.0529	-.1868	-.2487	.2201	.0504	-.1427	-.3425								
90.000	-.0315	-.1436	-.0102	.2272	.0188	-.1326	-.2495								
105.000			.1800	.2447	-.0647	-.1748	-.2502								
110.000								-.3324							
120.000	-.0494	-.0867	.3501	.2523	-.1121	-.1511	-.1758	-.3024							
135.000			.3942	.3533	-.1110	-.0493	-.1089								
150.000	.0388	.0497	.3928	.3455	-.0170	.0468	-.0859								
165.000	.0587		.3581		.3033	.1337	-.2781								
180.000	.0577	.1319	.3267	.3984											
320.000	.2549	.4440	.5747	.3586	-.3032	-.2890	-.2848								

ARC11-019 IAB1 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB16)

ALPHA0( 4) = .076 BETA0 ( 2) = -4.111

## SECTION ( 1) ORBITER FUSELAGE

## DEPENDENT VARIABLE CP

X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.2898	.7570	.3217	.2414	.2549	.8916		-.4433		-.0604	-.1549	-.1441	-.1264	-.0057	.1406
20.000			.3787	.2660	.2482	.5178		-.4593		-.0771					
40.000			.5473	.3125	.2519	.2865		-.3620		-.3653	-.0501	-.0978	-.1958	-.0557	.1932
55.000			.6372	.3994	.2970	.2355		-.0296		-.1632					
70.000			.6588	.4139	.2862	.2471		.0681		-.0845	-.4869	-.1918	-.1817	-.1049	
90.000		.8490	.6646	.4345	.2889	.2757		.1384		-.0544	-.4514	-.3051	-.2233	-.1083	
120.000			.6427	.4587	.3379	.3916		.3804		-.0700	-.3642	-.6107	-.2528	-.1894	
140.000										-.1225					
150.000			.5678	.4200	.3542	.4219				-.4214	-.6685	-.4840	-.2621	-.2003	
151.000									.4908						
156.000								.7773							
162.000									.5279						
165.000										-.5356	-.5864	-.4669	-.3027	-.1763	
169.000								.8158							
174.000							.9535								
180.000	1.2898	.7261	.4714	.3930	.3423	.4107		.7261		-.6445	-.5992	-.3905	-.3537	-.1493	
305.000			.3217	.1929	.1665	.0821		-.3124		-.3855					
320.000			.3263	.2037	.2158	.1570		-.6628		-.1387	-.2499	-.1596	-.1418	-.0393	.0812
340.000			.3496	.2165	.2532	.3950		-.5510		-.0653					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.2263	.3633	.5591	.2354	-.3753	-.3087	-.3143		-.2534	-.2537					
40.000	.1423	.2006	.2910	-.1406	-.4171	-.3464	-.3376		-.2382	-.2372					
70.000	-.0322	-.1996	-.1800	.2037	.0180	-.1628	-.3552								
90.000	-.0012	-.1442	.0473	.2051	-.0187	-.1524	-.2697								
105.000			.1980	.2185	-.1076	-.1948	-.2741								
110.000								-.3281							
120.000	-.0238	-.0455	.3382	.2120	-.1483	-.2009	-.2174	-.3177							
135.000			.3949	.3545	-.1285	-.1040	-.1462								
150.000	.0481	.1049	.3912	.3609	-.0315	-.0246	-.1242								
165.000	.0650		.3750		.2457	.0527	-.2836								
180.000	.0781	.1680	.3463	.4148											
320.000	.2300	.4097	.5314	.2939	-.2932	-.2670	-.2761								

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## 1A81A - PRESSURE SOURCE DATA TABULATION

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ARC11-019 1A81 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB16)

ALPHA0 ( 4 ) = .084 BETA0 ( 3 ) = -.007

## SECTION ( 1 ) ORBITER FUSELAGE

## DEPENDENT VARIABLE CP

X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.3238	.7483	.2808	.2144	.2134	.7216		-.3967		-.0474	-.1023	-.1144	-.1078	-.0162	.1012
20.000			.3065	.2137	.1972	.4428		-.5542		-.0380					
40.000			.4213	.2319	.1668	.2342		-.4418		-.1568	-.1056	-.1283	-.1642	-.0387	.1478
55.000			.4889	.2775	.1759	.1503		-.1039		-.2655					
70.000			.5137	.2859	.1604	.1595		-.0079		-.1785	-.5846	-.2884	-.2404	-.1333	
90.000		.6741	.5367	.3109	.1661	.1871		.0580		-.1561	-.5494	-.4015	-.2464	-.1337	
120.000			.5528	.3787	.2509	.3177		.2944		-.1970	-.4607	-.7053	-.2303	-.1323	
140.000										-.2952					
150.000			.5329	.3989	.3225	.3940				-.5226	-.6661	-.4844	-.3263	-.1045	
151.000									.4085						
156.000								.7116							
162.000									.4644						
165.000										-.5385	-.5829	-.3831	-.3612	-.0961	
169.000								.7938							
174.000						.9241									
180.000	1.3238	.7143	.4961	.4111	.3497	.4298		.7728		-.6628	-.6445	-.3582	-.3653	-.0954	
305.000			.4584	.2802	.2171	.1456		-.1986		-.2309					
320.000			.3821	.2171	.2141	.2165		-.5043		-.0630	-.2420	-.0853	-.0887	-.0238	.1127
340.000			.3402	.2032	.2240	.4401		-.4329		-.0038					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1742	.2448	.3039	.0861	-.3670	-.3133	-.2974		-.2552	-.2545					
40.000	.1522	.2073	.2212	-.0348	-.4222	-.3319	-.3031		-.2531	-.2504					
70.000	-.0302	-.1836	-.0054	.1790	-.0183	-.1943	-.3606								
90.000	.0049	-.1204	.1003	.1621	-.0703	-.1788	-.2842								
105.000			.1854	.1496	-.1596	-.2223	-.2957								
110.000								-.3552							
120.000	.0347	.0449	.2664	.1785	-.1788	-.2571	-.2889	-.3281							
135.000			.3127	.3866	-.0767	-.1642	-.2146								
150.000	.0637	.1462	.3204	.4145	-.0099	-.1084	-.1936								
165.000	.0715		.3346		.1721	-.0432	-.2872								
180.000	.0732	.1526	.3471	.4934											
320.000	.1654	.2600	.3258	.0663	-.2951	-.3254	-.2805								

ARC11-019 IAB1 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB16)

ALPHA0(4) = .099 BETA0(4) = 4.099

SECTION (1) ORBITER FUSELAGE		DEPENDENT VARIABLE CP													
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.2891	.7365	.2847	.2125	.2110	.8690		-.4974		-.1448	-.1146	-.1563	-.1241	-.0744	.0807
20.000			.2627	.1832	.1752	.3506		-.5266		-.1398					
40.000			.3033	.1646	.1324	.1434		-.5694		-.2012	-.1282	-.1888	-.2056	-.0221	.1125
55.000			.3383	.1589	.0889	.0661		-.2234		-.3833					
70.000			.3600	.1555	.0613	.0761		-.1067		-.2868	-.6767	-.4151	-.3110	-.0848	
90.000		.4652	.3950	.1839	.0593	.0949		-.0371		-.2714	-.6493	-.5916	-.2717	-.0875	
120.000			.4363	.2746	.1434	.2226		.1762		-.3334	-.5782	-.7873	-.2931	-.1053	
140.000										-.5297					
150.000			.4565	.3509	.2620	.3319				-.6123	-.6503	-.4292	-.4223	-.1320	
151.000									.2946						
156.000								.6208							
162.000									.3738						
165.000										-.5497	-.6743	-.3892	-.3844	-.1431	
169.000								.7402							
174.000							.8837								
180.000	1.2891	.6780	.4844	.3961	.3319	.4038		.7485		-.6648	-.5877	-.3996	-.3324	-.1634	
305.000			.6077	.3957	.3172	.2280		-.0813		-.1617					
320.000			.4720	.2690	.2494	.2785		-.3980		-.0815	-.3112	-.0056	-.1623	.0713	.1670
340.000			.3832	.2224	.2283	.5070		-.5684		.0049					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1778	.2743	.3770	.1769	-.2858	-.3039	-.3017		-.2490	-.2500					
40.000	.1974	.3337	.4759	.2809	-.4597	-.2651	-.2875		-.2527	-.2497					
70.000	.0036	-.1306	.0620	.1817	-.0657	-.2425	-.4109								
90.000	.0492	-.0505	.1214	.1729	-.1204	-.2459	-.3439								
105.000			.1987	.1756	-.2092	-.2719	-.3541								
110.000								-.3516							
120.000	.0799	.0941	.2413	.0215	-.2749	-.3568	-.4016	-.3208							
135.000			.3045	.3145	-.1987	-.2736	-.3107								
150.000	.0931	.1606	.3264	.3777	-.1011	-.2341	-.3006								
165.000	.0884		.3328		.0737	-.1583	-.3063								
180.000	.0820	.1609	.3490	.4131											
320.000	.1553	.2258	.2306	-.2807	-.3012	-.3500	-.3394								

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## 1A81A - PRESSURE SOURCE DATA TABULATION

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ARC11-019 1A81 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB16)

ALPHA( 4) = .104 BETA( 5) = 6.156

SECTION ( 1) ORBITER FUSELAGE	DEPENDENT VARIABLE CP														
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.166	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.2553	.7217	.2791	.2056	.1912	.8244		-.4808		-.1614	-.2729	-.1718	-.1388	-.1607	.0399
20.000			.2361	.1588	.1537	.2924		-.5332		-.2194					
40.000			.2399	.1277	.1067	.0894		-.6266		-.2040	-.1788	-.2511	-.2424	-.0233	.1050
55.000			.2599	.1041	.0523	.0295		-.2702		-.4469					
70.000			.2822	.0933	.0169	.0386		-.1469		-.3399	-.7251	-.4735	-.3333	-.0180	
90.000		.3518	.3177	.1162	.0037	.0553		-.0785		-.3268	-.6983	-.6526	-.2934	-.0324	
120.000			.3697	.2154	.0874	.1791		.1148		-.3894	-.6278	-.8217	-.3588	-.0835	
140.000										-.5902					
150.000			.4034	.3099	.2185	.2930				-.6352	-.6902	-.4333	-.4515	-.1693	
151.000									.2210						
156.000								.5633							
162.000									.3196						
165.000										-.5652	-.6925	-.4061	-.3917	-.2074	
169.000								.7091							
174.000						.8164									
180.000	1.2553	.6313	.4543	.3665	.3081	.3816		.7171		-.6725	-.5617	-.4574	-.3431	-.2607	
305.000			.6829	.4574	.3759	.2674		-.0306		-.0197					
320.000			.5160	.2956	.2727	.2950		-.3519		-.0454	-.2932	.0447	-.3551	.1077	.1813
340.000			.3986	.2206	.2291	.5167		-.5767		.0545					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1428	.2526	.3745	.1249	-.2803	-.3055	-.3059		-.2455	-.2435					
40.000	.2150	.3691	.5271	.3619	-.4409	-.2649	-.2968		-.2563	-.2533					
70.000	.0095	-.1140	.0575	.1885	-.0734	-.2552	-.4252								
90.000	.0505	-.0339	.1149	.1929	-.1298	-.2612	-.3566								
105.000			.1935	.1936	-.2151	-.2859	-.3654								
110.000								-.3346							
120.000	.0661	.0976	.2239	.0264	-.3082	-.3904	-.4418	-.3238							
135.000			.2534	.2846	-.2359	-.3201	-.3573								
150.000	.0745	.1473	.2717	.3993	-.1653	-.3039	-.3583								
165.000	.0668		.2940		.0411	-.2181	-.3163								
180.000	.0580	.1203	.3264	.3942											
320.000	.1505	.2330	.2206	-.2884	-.2984	-.3607	-.3735								

ARC11-019 IA81 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB16)

ALPHA0( 5) = 2.179 BETA0 ( 1) = -6.160

SECTION ( 1) ORBITER FUSELAGE	DEPENDENT VARIABLE CP														
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.2709	.7621	.3000	.2242	.2457	.8882		-.4413		-.1957	-.1642	-.1331	-.1898	.0584	.1840
20.000			.3878	.2639	.2484	.5339		-.4566		-.2561					
40.000			.5974	.3457	.2828	.3114		-.3101		-.3185	.0108	-.0638	-.0197	-.0250	.2440
55.000			.7028	.4639	.3504	.2683		.0146		-.1102					
70.000			.7168	.4713	.3333	.2754		.1054		-.0298	-.3635	-.1344	-.1285	-.1071	
90.000		.9076	.7083	.4777	.3292	.3019		.1775		.0183	-.3979	-.2822	-.1992	-.1135	
120.000			.6410	.4478	.3216	.3695		.4174		-.0094	-.3368	-.5629	-.3388	-.2635	
140.000										-.0604					
150.000			.5178	.3555	.2972	.3763			.5169	-.2337	-.6952	-.5693	-.3057	-.2720	
151.000															
156.000								.7932							
162.000									.5356						
165.000										-.5658	-.6493	-.5073	-.3281	-.2447	
169.000								.8062							
174.000							.9290								
180.000	1.2709	.6599	.3898	.3154	.2737	.3536		.6694		-.6709	-.5922	-.4758	-.3767	-.1931	
305.000			.2276	.1258	.1277	.0278		-.3719		-.4300					
320.000			.2599	.1514	.1939	.0839		-.7260		-.1753	-.2256	-.1637	-.1493	-.0404	.1106
340.000			.3154	.1814	.2469	.3508		-.5191		-.0750					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.2521	.3930	.5934	.2573	-.3558	-.2969	-.3085		-.2472	-.2397					
40.000	.1672	.2231	.3041	-.1106	-.4659	-.3602	-.3345		-.2306	-.2323					
70.000	-.0765	-.2460	-.2936	.1794	.0268	-.1531	-.3659								
90.000	-.0526	-.1894	-.1190	.1922	-.0025	-.1500	-.2735								
105.000			.1261	.2054	-.0867	-.1979	-.2755								
110.000								-.3392							
120.000	-.1362	-.1207	.3200	.2066	-.1231	-.1996	-.1999	-.3052							
135.000			.3615	.2959	-.1376	-.0960	-.1338								
150.000	.0014	.0546	.3574	.2975	-.0561	.0092	-.1068								
165.000	.0340		.3170		.2861	.1057	-.2802								
180.000	.0785	.1416	.2883	.3302											
320.000	.2939	.4613	.5897	.3699	-.2979	-.2863	-.2687								

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## 1A81A - PRESSURE SOURCE DATA TABULATION

PAGE 305

ARC11-019 1A81 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB16)

ALPHA0( 5) = 2.183 BETA0( 2) = -2.076

SECTION ( 1) ORBITER FUSELAGE			DEPENDENT VARIABLE CP													
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1590	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740	
PHI																
.000	1.3224	.7599	.2549	.1969	.2099	.8532		-.4017		-.0399	-.0882	-.0929	-.0679	.0134	.1350	
20.000			.3064	.2111	.2012	.4897		-.5909		-.0375						
40.000			.4724	.2541	.1911	.2477		-.3851		-.3186	-.0663	-.0824	-.0793	-.0411	.1879	
55.000			.5581	.3317	.2244	.1835		-.0582		-.2076						
70.000			.5763	.3354	.2002	.1888		.0350		-.1215	-.5342	-.2166	-.1819	-.1378		
90.000		.7483	.5849	.3522	.1988	.2167		.1070		-.0909	-.4980	-.2744	-.2383	-.1388		
120.000			.5647	.3828	.2491	.3245		.3455		-.1284	-.4183	-.6557	-.2642	-.1832		
140.000										-.1966						
150.000			.5019	.3626	.2872	.3717				-.4799	-.6970	-.5147	-.2638	-.1187		
151.000									.4485							
156.000								.7460								
162.000									.4882							
165.000										-.5572	-.5852	-.4683	-.3224	-.1032		
169.000								.7970								
174.000							.9365									
180.000	1.3224	.6763	.4333	.3515	.2987	.3806		.7413		-.6791	-.6710	-.3984	-.3779	-.0924		
305.000			.3667	.2146	.1720	.0780		-.2561		-.2277						
320.000			.3183	.1773	.1862	.1565		-.5652		-.0791	-.1659	-.0930	-.0779	-.0092	.1188	
340.000			.3052	.1756	.2073	.3881		-.4599		-.0183						
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450						
PHI																
.000	.2088	.3020	.4522	.1460	-.3551	-.2957	-.2898		-.2377	-.2418						
40.000	.1677	.2073	.2299	-.2581	-.3356	-.3310	-.3029		-.2276	-.2269						
70.000	-.0473	-.2184	-.2460	.1608	-.0270	-.1998	-.3876									
90.000	-.0115	-.1685	-.0129	.1538	-.0744	-.1951	-.3019									
105.000			.1539	.1622	-.1598	-.2466	-.3097									
110.000								-.3030								
120.000	-.0051	-.0364	.2770	.1586	-.1941	-.2675	-.2807	-.3199								
135.000			.3331	.3129	-.1669	-.1707	-.2122									
150.000	.0576	.1186	.3372	.3048	-.0703	-.0965	-.1903									
165.000	.0711		.3099		.1820	-.0273	-.2797									
180.000	.0799	.1660	.3143	.3865												
320.000	.2225	.3658	.4725	.2322	-.2792	-.2685	-.2564									

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ARC11-019 IAB1 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB16)

ALPHA0( 5) = 2.194 BETA0 ( 3) = 2.052

SECTION ( 1) ORBITER FUSELAGE		DEPENDENT VARIABLE CP													
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.3172	.7440	.2339	.1878	.1837	.8516		-.4164		-.0496	-.0807	-.1071	-.0935	-.0183	.1178
20.000			.2394	.1790	.1607	.3789		-.5087		-.0523					
40.000			.3485	.1817	.1249	.1728		-.5138		-.1350	-.1213	-.1573	-.0939	-.0126	.1502
55.000			.4039	.2087	.1120	.0788		-.1740		-.3051					
70.000			.4249	.2090	.0853	.0815		-.0707		-.2267	-.6187	-.3322	-.2632	-.1251	
90.000		.5609	.4507	.2300	.0826	.1115		.0032		-.2090	-.6017	-.3937	-.2723	-.1184	
120.000			.4689	.2959	.1588	.2397		.2382		-.2686	-.5397	-.7452	-.2500	-.1100	
140.000										-.4423					
150.000			.4527	.3300	.2413	.3236				-.5960	-.6974	-.4994	-.3592	-.0943	
151.000									.3404						
156.000								.6605							
162.000									.4040						
165.000										-.5706	-.6787	-.4128	-.3988	-.0953	
169.000								.7602							
174.000							.8945								
180.000	1.3172	.6554	.4393	.3495	.2903	.3703		.7521		-.7037	-.6784	-.4034	-.3656	-.1007	
305.000			.5250	.3170	.2586	.1742		-.1393		-.1972					
320.000			.4104	.2206	.2120	.2363		-.4433		-.0743	-.2586	-.0298	-.0019	.0212	.1563
340.000			.3266	.1800	.2041	.4692		-.5123		.0070					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9690	.9990	1.0140	1.0450					
PHI															
.000	.2052	.2729	.3454	.1486	-.3002	-.2863	-.2673		-.2361	-.2283					
40.000	.2005	.2956	.4004	.1688	-.4325	-.2751	-.2622		-.2195	-.2239					
70.000	-.0524	-.1920	-.0803	.1557	-.0596	-.2359	-.4015								
90.000	-.0111	-.1213	.0470	.1455	-.1113	-.2282	-.3220								
105.000			.1513	.1333	-.2135	-.2755	-.3356								
110.000								-.3128							
120.000	.0586	.0355	.2353	.2022	-.2248	-.3207	-.3646	-.3321							
135.000			.2888	.3037	-.1484	-.2304	-.2851								
150.000	.0836	.1327	.3101	.3452	-.0954	-.1855	-.2712								
165.000	.0761		.3162		.1016	-.1260	-.2895								
180.000	.0751	.1580	.3152	.3999											
320.000	.1833	.2404	.2385	-.1437	-.3231	-.3082	-.2864								

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## IABIA - PRESSURE SOURCE DATA TABULATION

PAGE 307

ARC11-019 IAB1 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB16)

ALPHA0( 5) = 2.199 BETA0( 4) = 6.158

SECTION ( 1) ORBITER FUSELAGE		DEPENDENT VARIABLE CP													
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.2467	.7309	.2673	.1817	.1730	.8097		-.4902		-.1537	-.1691	-.1598	-.0986	-.1266	.0672
20.000			.2164	.1369	.1397	.2769		-.5485		-.2159					
40.000			.2219	.1075	.0949	.0649		-.6500		-.2045	-.1328	-.2081	-.2107	-.0060	.1236
55.000			.2425	.0819	.0430	-.0073		-.2902		-.4518					
70.000			.2618	.0724	.0039	.0110		-.1643		-.3400	-.7233	-.4446	-.3254	-.0177	
90.000		.3196	.2992	.0913	-.0099	.0311		-.0892		-.3203	-.6990	-.5710	-.2872	-.0207	
120.000			.3387	.1797	.0527	.1550		.1121		-.3943	-.6391	-.8391	-.3069	-.0717	
140.000										-.5999					
150.000			.3596	.2607	.1661	.2591				-.6589	-.7112	-.4764	-.4708	-.1400	
151.000									.2150						
156.000								.5530							
162.000									.3097						
165.000										-.6009	-.7179	-.4455	-.4135	-.1741	
167.000								.6924							
174.000							.7981								
180.000	1.2467	.5710	.3991	.3139	.2482	.3407		.6957		-.6978	-.5965	-.5009	-.3619	-.2150	
305.000			.6859	.4557	.3760	.2628		-.0450		-.0590					
320.000			.5191	.2913	.2666	.2911		-.3511		-.1095	-.2761	.0802	-.2422	.1084	.1956
340.000			.3902	.2054	.2094	.5116		-.6234		.0633					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1614	.2746	.3892	.1346	-.2549	-.3072	-.2878		-.2363	-.2342					
40.000	.2415	.3941	.5395	.3758	-.4331	-.2563	-.2929		-.2488	-.2532					
70.000	-.0079	-.1523	-.0483	.1606	-.0842	-.2610	-.4383								
90.000	.0417	-.0784	.0159	.1697	-.1422	-.2640	-.3761								
105.000			.1048	.1812	-.2299	-.2987	-.3849								
110.000								-.2956							
120.000	.0782	.0625	.1875	.1780	-.2819	-.3930	-.4371	-.3104							
135.000			.2442	.2802	-.1919	-.3233	-.3719								
150.000	.0934	.1362	.2412	.3096	-.1522	-.3159	-.3702								
165.000	.0913		.2550		.0001	-.2337	-.3091								
180.000	.0839	.1200	.2851	.3072											
320.000	.1771	.2490	.2402	-.2806	-.2950	-.3521	-.3570								

ARC11-019 IAB1 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB16)

ALPHA0( 6) = 4.246 BETA0( 1) = -6.141

SECTION ( 1) ORBITER FUSELAGE				DEPENDENT VARIABLE CP											
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.2670	.7776	.2937	.2117	.2408	.8701		-.4566		-.1934	-.1450	-.1318	-.1460	.0793	.1949
20.000			.3899	.2675	.2485	.5280		-.4802		-.2678					
40.000			.6067	.3596	.2939	.3134		-.2979		-.3162	.0267	-.0525	.0363	-.0074	.2606
55.000			.7097	.4803	.3646	.2665		.0120		-.1036					
70.000			.7118	.4769	.3357	.2626		.0986		-.0262	-.3727	-.0981	-.1012	-.1299	
90.000		.8901	.6881	.4662	.3145	.2833		.1719		.0262	-.3970	-.2721	-.1697	-.1366	
120.000			.6008	.4100	.2705	.3310		.4125		-.0111	-.3456	-.5667	-.4269	-.3151	
140.000										-.0678					
150.000			.4637	.3035	.2403	.3269				-.1977	-.7225	-.6081	-.3365	-.2938	
151.000									.5063						
156.000								.7831							
162.000									.5196						
165.000										-.5883	-.6786	-.5366	-.3466	-.2217	
169.000								.7918							
174.000							.9048								
180.000	1.2670	.6132	.3377	.2687	.2202	.3085		.6538		-.6868	-.6283	-.5061	-.3924	-.1604	
305.000			.2057	.1105	.1192	.0031		-.3852		-.3393					
320.000			.2383	.1358	.1780	.0167		-.7369		-.1589	-.1937	-.1477	-.1330	-.0291	.1272
340.000			.2968	.1644	.2325	.3344		-.5147		-.0779					
X/LB	.6320	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.2565	.3896	.5951	.2578	-.3377	-.2968	-.2934		-.2371	-.2293					
40.000	.1686	.2297	.3149	-.1111	-.4663	-.3568	-.3069		-.2179	-.2236					
70.000	-.1025	-.2957	-.3587	.1138	-.0088	-.1758	-.3789								
90.000	-.0799	-.2326	-.1947	.1006	-.0300	-.1758	-.2874								
105.000			.1000	.1303	-.1064	-.2355	-.3022								
110.000								-.2939							
120.000	-.1908	-.2216	.2613	.1279	-.1401	-.2348	-.2363	-.3074							
135.000			.2955	.2336	-.1684	-.1305	-.1692								
150.000	-.0121	.0535	.2935	.2350	-.1114	-.0207	-.1338								
165.000	.0264		.2665		.2371	.0955	-.2781								
180.000	.0533	.1360	.2581	.2798											
320.000	.3005	.4533	.5805	.3595	-.2948	-.2803	-.2552								

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## IAB1A - PRESSURE SOURCE DATA TABULATION

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ARC11-019 IAB1 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB16)

ALPHA0( 6) = 4.252 BETA0( 2) = -4.091

SECTION ( 1) ORBITER FUSELAGE		DEPENDENT VARIABLE CP													
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.3059	.7609	.2358	.1803	.2126	.8701		-.4878		-.0792	-.1140	-.1082	-.0242	.0306	.1664
20.000			.3226	.2150	.2068	.5199		-.6029		-.0568					
40.000			.5336	.2957	.2369	.2782		-.3523		-.4258	-.0066	-.0580	-.0158	-.0107	.2279
55.000			.6293	.3949	.2885	.2117		-.0384		-.1690					
70.000			.6317	.3911	.2595	.2113		.0519		-.0819	-.4854	-.1343	-.1376	-.1601	
90.000		.8135	.6241	.3915	.2382	.2368		.1258		-.0427	-.4542	-.2379	-.2003	-.1547	
120.000			.5649	.3749	.2410	.3105		.3718		-.0798	-.4017	-.6180	-.3585	-.2849	
140.000										-.1444					
150.000			.4623	.3038	.2380	.3293				-.4452	-.7314	-.5720	-.2943	-.1740	
151.000									.4705						
156.000								.7632							
162.000									.4973						
165.000										-.5939	-.6745	-.5412	-.3272	-.1382	
169.000								.7900							
174.000						.9192									
180.000	1.3059	.6250	.3594	.2811	.2308	.3215		.6900		-.7020	-.6694	-.4640	-.3847	-.1192	
305.000			.2648	.1474	.1340	.0216		-.3346		-.3108					
320.000			.2528	.1430	.1807	.1048		-.6705		-.1468	-.1417	-.1067	-.0892	-.0046	.1073
340.000			.2771	.1511	.2117	.3501		-.5433		-.1079					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.2445	.3659	.5598	.2289	-.3469	-.2809	-.2875		-.2425	-.2418					
40.000	.1617	.2146	.3047	-.1576	-.4313	-.3447	-.2963		-.2219	-.2229					
70.000	-.0800	-.2816	-.3492	.1136	-.0391	-.2076	-.4093								
90.000	-.0509	-.2244	-.1295	.1024	-.0739	-.2079	-.3224								
105.000			.1050	.1241	-.1505	-.2616	-.3373								
110.000								-.2907							
120.000	-.1091	-.1272	.2618	.1229	-.1833	-.2818	-.2886	-.3282							
135.000			.2968	.2538	-.1944	-.1840	-.2216								
150.000	.0188	.0904	.2857	.2764	-.1269	-.0954	-.1885								
165.000	.0560		.2867		.1707	-.0021	-.2863								
180.000	.0739	.1361	.2695	.3662											
320.000	.2691	.4206	.5362	.2987	-.2951	-.2645	-.2592								

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ARC11-019 IAB1 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB16)

ALPHA0 ( 6 ) = 4.259 BETA0 ( 3 ) = -.003

SECTION ( 1 ) ORBITER FUSELAGE	DEPENDENT VARIABLE CP														
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.3178	.7294	.1798	.1685	.1759	.6589		-.3122		-.0131	-.0623	-.0691	-.0504	.0298	.1448
20.000			.2304	.1715	.1557	.4022		-.4214		-.0339					
40.000			.3903	.2060	.1499	.1629		-.4451		-.1270	-.0806	-.1144	-.0571	-.0024	.1769
55.000			.4718	.2630	.1648	.1016		-.1273		-.2596					
70.000			.4883	.2583	.1297	.1050		-.0296		-.1762	-.5142	-.2695	-.2276	-.1474	
90.000		.6372	.4976	.2714	.1169	.1415		.0458		-.1461	-.5470	-.3146	-.2814	-.1451	
120.000			.4845	.3038	.1633	.2516		.2896		-.2021	-.4912	-.7120	-.2928	-.1444	
140.000										-.2982					
150.000			.4381	.2988	.2137	.3109				-.5585	-.7349	-.5573	-.2874	-.0967	
151.000									.3901						
156.000								.6998							
162.000									.4349						
165.000										-.5886	-.6594	-.4609	-.3539	-.0849	
169.000								.7708							
174.000						.8965									
180.000	1.3178	.6221	.3900	.3025	.2407	.3426		.7420		-.7504	-.7034	-.4304	-.3834	-.0815	
305.000			.4305	.2603	.2086	.1013		-.2060		-.1696					
320.000			.3244	.1766	.1817	.1517		-.4632		.0006	-.1476	-.0454	-.0242	.0032	.1512
340.000			.2569	.1577	.1824	.3814		-.3912		-.0075					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.2181	.2786	.3338	.1070	-.3058	-.2815	-.2735		-.2307	-.2367					
40.000	.1884	.2468	.2584	-.0184	-.3729	-.2980	-.2627		-.2178	-.2154					
70.000	-.0826	-.2650	-.2745	.1134	-.0680	-.2373	-.4237								
90.000	-.0430	-.2032	-.0261	.1023	-.1280	-.2309	-.3300								
105.000			.1378	.1016	-.2049	-.2886	-.3459								
110.000								-.3023							
120.000	-.0116	-.0461	.2314	.1054	-.2349	-.3151	-.3503	-.3155							
135.000			.2679	.3482	-.1867	-.2343	-.2742								
150.000	.0549	.0756	.2929	.3482	-.0933	-.1724	-.2492								
165.000	.0627		.2976		.1178	-.1065	-.2820								
180.000	.0657	.0986	.3023	.4582											
320.000	.2147	.2956	.3446	.0804	-.2653	-.2820	-.2499								

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## IA81A - PRESSURE SOURCE DATA TABULATION

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ARC11-019 IA81 LVAP (ELHL SEALED) ORB. FUSELAGE

(RETB16)

ALPHA0 (6) = 4.261 BETA0 (4) = 4.109

## SECTION (1) ORBITER FUSELAGE

## DEPENDENT VARIABLE CP

X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.2905	.7447	.2246	.1585	.1658	.8079		-.5320		-.1576	-.0840	-.1087	-.0883	-.0303	.1177
20.000			.1953	.1366	.1411	.3070		-.5435		-.1811					
40.000			.2517	.1356	.1101	.0980		-.5943		-.1968	-.1307	-.1460	-.1238	.0050	.1494
55.000			.2992	.1360	.0744	.0111		-.2552		-.3932					
70.000			.3219	.1265	.0369	.0132		-.1355		-.2955	-.6297	-.3552	-.2995	-.0719	
90.000		.4137	.3536	.1471	.0204	.0467		-.0522		-.2708	-.6561	-.4196	-.2965	-.0642	
120.000			.3787	.2138	.0725	.1616		.1812		-.3323	-.6067	-.7985	-.2796	-.0762	
140.000										-.5309					
150.000			.3725	.2610	.1516	.2544				-.6445	-.7140	-.5028	-.3836	-.0901	
151.000									.2777						
156.000								.6066							
162.000									.3447						
165.000										-.5968	-.7339	-.4568	-.4141	-.1046	
169.000								.7173							
174.000							.8488								
180.000	1.2905	.5763	.3800	.2926	.2180	.3123		.7197		-.7169	-.6476	-.4706	-.3641	-.1198	
305.000			.6053	.3820	.3029	.2076		-.1027		-.1388					
320.000			.4626	.2400	.1907	.2438		-.3956		-.1899	-.2611	.0029	.0728	.0991	.2077
340.000			.3453	.1688	.1761	.4869		-.7021		.0060					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.2067	.2997	.4035	.1928	-.2277	-.2638	-.2588		-.2170	-.2183					
40.000	.2391	.3587	.4928	.2856	-.4106	-.2227	-.2564		-.2278	-.2298					
70.000	-.0351	-.2028	-.1535	.1290	-.0942	-.2713	-.4375								
90.000	.0169	-.1363	-.0108	.1229	-.1465	-.2635	-.3648								
105.000			.0907	.1232	-.2560	-.3225	-.3831								
110.000								-.3079							
120.000	.0753	.0206	.2010	.1905	-.2794	-.3790	-.4259	-.3241							
135.000			.2697	.2872	-.2308	-.3007	-.3498								
150.000	.0992	.1106	.2687	.3233	-.1431	-.2736	-.3458								
165.000	.0938		.2677		.0420	-.2057	-.3076								
180.000	.0874	.1316	.2687	.3485											
320.000	.1954	.2584	.2562	-.2556	-.2585	-.3013	-.2836								

ARC11-019 IAB1 LVAP(ELHL SEALED) ORB. FUSELAGE

(9)TB16)

ALPHA( 6) = 4.259 BETA( 5) = 6.170

SECTION ( 1) ORBITER FUSELAGE		DEPENDENT VARIABLE CP													
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.2359	.7435	.2552	.1675	.1584	.7803		-.5338		-.1515	-.1381	-.1750	-.1063	-.1063	.0680
20.000			.1978	.1179	.1300	.2628		-.5513		-.2348					
40.000			.2026	.0949	.0875	.0170		-.6613		-.2090	-.1364	-.1868	-.2057	.0035	.1387
55.000			.2198	.0672	.0332	-.0460		-.3051		-.4593					
70.000			.2422	.0531	-.0077	-.0147		-.1759		-.3455	-.7275	-.4142	-.3289	-.0277	
90.000		.2869	.2762	.0723	-.0272	.0089		-.0930		-.3181	-.7075	-.5120	-.2957	-.0237	
120.000			.3093	.1482	.0222	.1142		.1195		-.3938	-.6571	-.8488	-.3068	-.0512	
140.000										-.5991					
150.000			.3141	.2171	.1142	.2076			.2084	-.6743	-.7397	-.5093	-.4828	-.1107	
151.000															
156.000								.5463							
162.000									.2947						
165.000										-.6279	-.7509	-.4807	-.4408	-.1435	
169.000								.6801							
174.000							.7721								
180.000	1.2359	.5171	.3471	.2630	.1858	.2799		.6744		-.7194	-.6384	-.5365	-.3881	-.1807	
305.000			.6915	.4647	.3641	.2570		-.0515		-.0554					
320.000			.5285	.2984	.2679	.2816		-.3472		-.1587	-.2685	.0875	.0636	.1326	.2164
340.000			.3878	.1914	.1752	.4974		-.6556		.0723					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1556	.2712	.3921	.1364	-.2407	-.2755	-.2744		-.2225	-.2245					
40.000	.2465	.3834	.5252	.3553	-.4156	-.2329	-.2771		-.2437	-.2424					
70.000	-.0290	-.1892	-.1619	.1455	-.0928	-.2789	-.4449								
90.000	.0217	-.1243	-.0427	.1590	-.1479	-.2799	-.3854								
105.000			.0391	.1972	-.2626	-.3339	-.4013								
110.000								-.3255							
120.000	.0735	.0276	.1492	.2704	-.3190	-.4016	-.4503	-.3289							
135.000			.2100	.3143	-.2245	-.3384	-.3905								
150.000	.0779	.1019	.2364	.2154	-.1388	-.3157	-.3928								
165.000	.0806		.2347		-.0304	-.2545	-.3191								
180.000	.0697	.1155	.2462	.2589											
320.000	.1850	.2590	.2506	-.2734	-.2633	-.3309	-.3228								

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ARC11-019 IAB1 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB16)

ALPHA0( 7) = 6.364 BETA0 ( 1) = -4.074

SECTION ( 1) ORBITER FUSELAGE		DEPENDENT VARIABLE CP													
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.3051	.7369	.1826	.1558	.1949	.8384		-.4688		-.0664	-.0849	-.0751	-.0351	.0626	.1783
20.000			.2852	.1955	.1909	.5155		-.6731		-.0424					
40.000			.5257	.2904	.2434	.2694		-.3350		-.4087	.0087	-.0471	.0804	.0221	.2359
55.000			.6368	.4081	.3073	.2024		-.0480		-.1602					
70.000			.6375	.3964	.2602	.1971		.0412		-.0811	-.4615	-.1369	-.1155	-.1745	
90.000		.8076	.6155	.3836	.2286	.2185		.1174		-.0330	-.4406	-.2107	-.1655	-.1795	
120.000			.5384	.3358	.1905	.2701		.3660		-.0795	-.4034	-.6264	-.4564	-.3245	
140.000										-.1498					
150.000			.4214	.2513	.1783	.2847				-.4417	-.7482	-.6251	-.3174	-.1483	
151.000									.4682						
156.000								.7572							
162.000									.4909						
165.000										-.6148	-.6969	-.5698	-.3305	-.1126	
169.000								.7826							
174.000						.9142									
180.000	1.3051	.5810	.3123	.2350	.1752	.2810		.6807		-.7216	-.6925	-.4954	-.3921	-.0937	
305.000			.2416	.1422	.1331	-.0017		-.3353		-.2393					
320.000			.2066	.1270	.1667	.0924		-.5549		-.0991	-.1116	-.0794	-.0526	.0162	.1220
340.000			.2133	.1331	.2034	.3204		-.4634		-.0467					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.2460	.3606	.5548	.2368	-.3525	-.2803	-.2763		-.2275	-.2302					
40.000	.1662	.2215	.3129	-.1478	-.4084	-.3271	-.2817		-.2137	-.2167					
70.000	-.0927	-.3110	-.3815	.0400	-.0660	-.2271	-.4197								
90.000	-.0644	-.2443	-.2162	.0309	-.0991	-.2163	-.3354								
105.000			.0529	.0777	-.1648	-.2766	-.539								
110.000								-.2941							
120.000	-.1554	-.1893	.2020	.0900	-.1833	-.2952	-.3073	-.3275							
135.000			.2196	.2285	-.1964	-.2085	-.2398								
150.000	.0036	.0590	.2220	.2727	-.1220	-.1133	-.2095								
165.000	.0329		.2304		.1633	-.0074	-.2914								
180.000	.0578	.0870	.2476	.4156											
320.000	.2764	.3986	.5179	.2572	-.2958	-.2466	-.2452								



ARC11-019 IA81 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB16)

ALPHA( 7) = 6.367 BETA( 2) = -2.043

SECTION ( 1) ORBITER FUSELAGE		DEPENDENT VARIABLE CP													
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.3149	.7241	.1426	.1606	.1774	.7637		-.2651		-.0056	-.0693	-.0561	-.0263	.0602	.1666
20.000			.2192	.1724	.1683	.4404		-.4291		-.0391					
40.000			.4402	.2405	.1980	.1952		-.3705		-.1650	-.0629	-.0727	.0317	.0113	.2132
55.000			.5495	.3421	.2469	.1509		-.0806		-.1921					
70.000			.5605	.3323	.1980	.1062		.0055		-.1211	-.4183	-.2216	-.1756	-.1910	
90.000		.7189	.5543	.3259	.1673	.1349		.0852		-.0806	-.4789	-.2591	-.2400	-.1833	
120.000			.5021	.3100	.1672	.2469		.3343		-.1323	-.4522	-.6406	-.4007	-.2367	
140.000										-.2149					
150.000			.4131	.2618	.1778	.2544				-.5094	-.7586	-.5939	-.3051	-.1178	
151.000									.4314						
156.000								.7324							
162.000									.4628						
165.000										-.6160	-.6726	-.5567	-.3269	-.0992	
169.000								.7742							
174.000						.9051									
180.000	1.3149	.5866	.3319	.2523	.1843	.2922		.7096		-.7504	-.7305	-.4725	-.3514	-.0840	
305.000			.3288	.1997	.1686	.0337		-.2698		-.1448					
320.000			.2490	.1484	.1369	.1028		-.4275		-.0100	-.1204	-.0575	-.0330	.0207	.1484
340.000			.2044	.1360	.1873	.3185		-.3441		.0015					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.2301	.3159	.4507	.1906	-.3212	-.2736	-.2626		-.2218	-.2205					
40.000	.1899	.2308	.2521	-.2633	-.3354	-.3033	-.2540		-.2117	-.2124					
70.000	-.0975	-.3134	-.3812	.0555	-.0891	-.2477	-.4323								
90.000	-.0621	-.2431	-.1609	.0265	-.1394	-.2429	-.3471								
105.000			.0792	.0704	-.2055	-.3033	-.3654								
110.000								-.2883							
120.000	-.0911	-.1349	.2018	.0667	-.2214	-.3127	-.3461	-.3323							
135.000			.2102	.3214	-.2025	-.2299	-.2711								
150.000	.0241	.0228	.2237	.3936	-.1144	-.1602	-.2376								
165.000	.0497		.2518		.1136	-.0842	-.2880								
180.000	.0588	.0687	.2700	.4507											
320.000	.2433	.3598	.4578	.2017	-.2807	-.2481	-.2376								

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## 1AB1A - PRESSURE SOURCE DATA TABULATION

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ARC11-019 1AB1 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB16)

ALPHA0( 7) = 6.367 BETA0 ( 3) = .008

## SECTION ( 1) ORBITER FUSELAGE

## DEPENDENT VARIABLE CP

X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.3171	.7128	.1386	.1548	.1759	.6396		-.2815		.0067	-.0550	-.0471	-.0170	.0581	.1649
20.000			.1850	.1596	.1608	.3789		-.3373		-.0278					
40.000			.3748	.2003	.1614	.1488		-.4133		-.0482	-.0824	-.1003	-.0314	.0333	.1936
55.000			.4666	.2694	.1864	.0937		-.1209		-.1868					
70.000			.4803	.2637	.1395	.0996		-.0299		-.1617	-.4037	-.2757	-.2161	-.1568	
90.000		.6218	.4861	.2661	.1129	.1296		.0511		-.1306	-.5374	-.3072	-.2814	-.1565	
120.000			.4586	.2785	.1274	.2249		.2950		-.1930	-.5012	-.6567	-.3522	-.1575	
140.000										-.2895					
150.000			.3961	.2613	.1645	.2757				-.5619	-.7609	-.5853	-.2922	-.0871	
151.000									.3860						
156.000								.6951							
162.000									.4275						
165.000										-.6110	-.6932	-.4841	-.3150	-.0742	
169.000								.7617							
174.000							.8853								
180.000	1.3171	.5778	.3452	.2619	.1890	.3060		.7302		-.7734	-.7277	-.4516	-.3308	-.0719	
305.000			.4298	.2697	.1862	.0972		-.1928		-.1213					
320.000			.2994	.1742	.1682	.1395		-.3944		.0496	-.1409	-.0180	-.0046	.0291	.1679
340.000			.2196	.1463	.1743	.3721		-.3334		.0080					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.2321	.2932	.3501	.1179	-.3026	-.2720	-.2606		-.2237	-.2224					
40.000	.1987	.2557	.2769	-.0330	-.3558	-.2761	-.2471		-.2079	-.2109					
70.000	-.1039	-.3060	-.3589	.0710	-.0887	-.2518	-.4362								
90.000	-.0671	-.2334	-.1069	.0413	-.1527	-.2444	-.3467								
105.000			.0931	.0632	-.2221	-.3047	-.3676								
110.000								-.2820							
120.000	-.0404	-.0971	.1886	.0814	-.2366	-.3362	-.3752	-.3185							
135.000			.2185	.3340	-.1969	-.2576	-.3009								
150.000	.0444	.0152	.2586	.3771	-.1052	-.2002	-.2745								
165.000	.0563		.2745		.0916	-.1350	-.2867								
180.000	.0600	-.0445	.2762	.4956											
320.000	.2269	.3039	.3481	.0662	-.2616	-.2704	-.2421								

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OF POOR QUALITY

ARC11-019 1A81 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB16)

ALPHA0( 7) = 6.364 BETA0( 4) = 2.073

## SECTION ( 1) ORBITER FUSELAGE

## DEPENDENT VARIABLE CP

X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.3007	.7087	.1456	.1601	.1562	.7505		-.3860		-.0016	-.0466	-.0604	-.0324	.0336	.1492
20.000			.1559	.1557	.1464	.3202		-.3712		-.0187					
40.000			.2889	.1641	.1282	.1067		-.4751		-.0591	-.0821	-.1131	-.0676	.0269	.1711
55.000			.3707	.2106	.1333	.0359		-.1941		-.2079					
70.000			.3972	.1992	.0860	.0320		-.0916		-.2069	-.4114	-.3074	-.2560	-.1211	
90.000		.5057	.4109	.2059	.0614	.0776		-.0081		-.1902	-.5760	-.3454	-.3119	-.1154	
120.000			.4092	.2359	.0900	.1866		.2415		-.2583	-.5554	-.7092	-.3013	-.1057	
140.000										-.4133					
150.000			.3704	.2443	.1428	.2483				-.6135	-.7605	-.5670	-.2886	-.0727	
151.000									.3323						
156.000								.6494							
162.000									.3838						
165.000										-.6112	-.7192	-.4726	-.3211	-.0710	
169.000								.7383							
174.000							.8682								
180.000	1.3007	.5562	.3432	.2621	.1830	.2844		.7246		-.7547	-.7189	-.4619	-.3479	-.0807	
305.000			.5309	.3319	.2705	.1447		-.1440		-.1098					
320.000			.3903	.2031	.2027	.1805		-.4222		.0567	-.1483	-.0010	.0376	.0548	.1944
340.000			.2662	.1434	.1653	.4213		-.4101		-.0031					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.2267	.2917	.3644	.1734	-.2633	-.2627	-.2431		-.1989	-.2026					
40.000	.2153	.3052	.4072	.1589	-.4085	-.2350	-.2350		-.1999	-.2154					
70.000	-.0996	-.2811	-.2861	.1015	-.0968	-.2684	-.4487								
90.000	-.0554	-.2055	-.0501	.0833	-.1588	-.2593	-.3599								
105.000			.1105	.0752	-.2403	-.3223	-.3815								
110.000								-.3229							
120.000	.0060	-.0369	.1739	.0801	-.2643	-.3610	-.4020	-.3249							
135.000			.2466	.3376	-.1999	-.2874	-.3317								
150.000	.0627	.0548	.2773	.4094	-.1214	-.2502	-.3108								
165.000	.0654		.2770		.0550	-.1939	-.3037								
180.000	.0606	.0690	.2537	.4518											
320.000	.2131	.2616	.2530	-.1595	-.2775	-.2928	-.2584								

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ARC11-019 IAB1 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB16)

ALPHA0 ( 7 ) = 6.359 BETA0 ( 5 ) = 4.124

SECTION ( 1 ) ORBITER FUSELAGE		DEPENDENT VARIABLE CP													
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.2816	.7439	.1941	.1416	.1466	.7871		-.5215		-.1015	-.0776	-.0958	-.0669	-.0082	.1220
20.000			.1583	.1200	.1308	.2784		-.4757		-.0878					
40.000			.2251	.1211	.1078	.0762		-.6035		-.1421	-.0955	-.1391	-.1109	.0176	.1503
55.000			.2763	.1298	.0768	-.0200		-.2697		-.2886					
70.000			.3025	.1177	.0333	-.0132		-.1509		-.2953	-.4793	-.3378	-.2960	-.0652	
90.000		.3823	.3314	.1281	.0083	.0168		-.0637		-.2678	-.6444	-.3869	-.3258	-.0545	
120.000			.3455	.1808	.0370	.1405		.1792		-.3319	-.6167	-.7957	-.2847	-.0645	
140.000										-.5290					
150.000			.3300	.2162	.1089	.2206				-.6598	-.7500	-.5341	-.3129	-.0757	
151.000									.2686						
156.000								.5942							
162.000									.3310						
165.000										-.6252	-.7595	-.4868	-.3852	-.0919	
169.000								.7050							
174.000							.8209								
180.000	1.2816	.5207	.3314	.2447	.1631	.2737		.7050		-.7448	-.6742	-.5036	-.3769	-.1125	
305.000			.6140	.3982	.3292	.2134		-.1204		-.1348					
320.000			.4660	.2434	.2279	.2502		-.3889		-.1483	-.1774	.0203	.0967	.1068	.2179
340.000			.3276	.1537	.1573	.4771		-.7104		.0014					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.2010	.2954	.4036	.1929	-.2248	-.2546	-.2544		-.2094	-.2148					
40.000	.2311	.3403	.4671	.2503	-.3878	-.2141	-.2500		-.2232	-.2293					
70.000	-.0794	-.2417	-.2211	.0925	-.1282	-.2971	-.4630								
90.000	-.0182	-.1728	-.0379	.0888	-.1782	-.2870	-.3853								
105.000			.0919	.0726	-.2795	-.3521	-.4096								
110.000								-.3431							
120.000	.0490	-.0237	.1737	.1210	-.2901	-.3991	-.4451	-.3320							
135.000			.2641	.3101	-.2303	-.3258	-.3782								
150.000	.0885	.0652	.2685	.3327	-.1777	-.3014	-.3593								
165.000	.0827		.2388		.0011	-.2463	-.3198								
180.000	.0719	.0798	.2243	.3621											
320.000	.2012	.2592	.2618	-.2612	-.2506	-.2930	-.2789								

ARC11-019 1A81 LVAP(ELHL SEALED) ORB. FUSELAGE

(RET817) ( 19 OCT 74 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 976.0000 IN. XT  
 LREF = 1297.0000 INCHES YMRP = .0000 IN. YT  
 BREF = 1297.0000 INCHES ZMRP = 400.0000 IN. ZT  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

MACH = .900 RN/FT = 2.250  
 ELV-18 = 10.000 ELV-08 = 4.000  
 RUDDER = .000 SPDBRK = .000

ALPHA0 ( 1 ) = -6.178 BETA0 ( 1 ) = -4.055

## SECTION ( 1 ) ORBITER FUSELAGE

## DEPENDENT VARIABLE CP

X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.2088	.5611	.1684	.1160	.1163	.7725		-.5200		-.3047	-.3050	-.1539	-.0608	.0474	.0847
20.000			.2132	.1329	.1132	.3138		-.6015		-.2994					
40.000			.3728	.1609	.1086	.0662		-.7079		-.2949	-.4218	-.1038	-.0326	.0659	.1035
55.000			.4818	.2556	.1644	.0395		-.2874		-.3176					
70.000			.5348	.2927	.1747	.0824		-.1724		-.3528	-.7665	-.1141	.0450	.1001	
90.000		.7594	.5737	.3326	.1961	.1248		-.1070		-.3222	-.6952	-.1707	.0396	.0898	
120.000			.6072	.4165	.2957	.2925		.1721		-.3027	-.6470	-.4111	.0447	.0652	
140.000										-.2427					
150.000			.5679	.4154	.3429	.3647				-.4645	-.9105	-.2658	.0311	.0353	
151.000									.3172						
156.000								.6438							
162.000									.3705						
165.000										-.8703	-.8075	-.2129	.0148	.0268	
169.000								.7004							
174.000							.8602								
180.000	1.2088	.7394	.4768	.3845	.3293	.3546		.6088		-.9745	-.7669	-.1772	-.0057	.0203	
305.000			.1742	.0548	.0186	-.1108		-.6213		-.4291					
320.000			.1640	.0632	.0627	-.0564		-.7711		-.3645	-.3608	-.1540	-.0580	.0065	.0460
340.000			.1919	.0884	.1072	.1853		-.5765		-.3419					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1016	.2173	.4418	.0261	-.3396	-.3054	-.3050		-.2554	-.2592					
40.000	.0253	.0446	.1249	-.2898	-.4580	-.2837	-.2704		-.2519	-.2381					
70.000	-.0177	-.0674	.0360	.1427	-.1638	-.3791	-.2701								
90.000	.0216	-.0124	.1072	.1809	-.2148	-.3234	-.4751								
105.000			.1716	.2320	-.3228	-.3398	-.4816								
110.000								-.2536							
120.000	.0495	.0789	.2717	.3367	-.3451	-.3365	-.3937	-.2517							
135.000			.3459	.4309	-.2184	-.1952	-.2701								
150.000	.0560	.1256	.3489	.4478	-.1108	-.1303	-.2372								
165.000	.0556		.3272		.0927	-.0873	-.2433								
180.000	.0511	.1226	.3054	.5022											
320.000	.0644	.2211	.3562	.0288	-.3058	-.2854	-.2513								

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## IAB1A - PRESSURE SOURCE DATA TABULATION

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ARC11-019 IAB1 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB17)

ALPHA0 (1) = -6.167 BETA0 (2) = -2.018

## SECTION (1) ORBITER FUSELAGE

## DEPENDENT VARIABLE CP

X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.2191	.5681	.1725	.1229	.1196	.7187		-.5829		-.2794	-.2666	-.1345	-.0339	.0485	.0750
20.000			.2018	.1267	.1081	.2830		-.6235		-.2957					
40.000			.3260	.1363	.0867	.0403		-.7632		-.3163	-.4086	-.0964	-.0210	.0569	.0881
55.000			.4115	.1992	.1116	.0005		-.3570		-.4110					
70.000			.4600	.2242	.1131	.0313		-.2362		-.4387	-.7892	-.1030	.0452	.0941	
90.000		.6730	.4998	.2645	.1300	.0669		-.1738		-.4182	-.8069	-.1693	.0441	.0827	
120.000			.5502	.3692	.2435	.2435		.1068		-.4075	-.7050	-.2929	.0406	.0622	
140.000										-.4163					
150.000			.5459	.4037	.3275	.3471				-.7547	-.8980	-.2161	.0398	.0439	
151.000									.2596						
156.000								.5996							
162.000									.3258						
165.000										-.8805	-.7958	-.1796	.0303	.0405	
169.000								.6852							
174.000							.8509								
180.000	1.2191	.7380	.4881	.3990	.3395	.3653		.6373		-.9517	-.8707	-.1191	.0216	.0359	
305.000			.2443	.1043	.0570	-.0792		-.5702		-.3929					
320.000			.2054	.0909	.0864	-.0131		-.9290		-.3236	-.3602	-.1199	-.0252	.0198	.0570
340.000			.2130	.1020	.1216	.2238		-.5974		-.3082					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.0773	.1604	.3297	-.0478	-.3203	-.2935	-.2844		-.2317	-.2282					
40.000	.0251	.0389	.0607	-.4063	-.3629	-.2598	-.2455		-.2317	-.2229					
70.000	-.0090	-.0612	.0332	.1167	-.2044	-.4138	-.2552								
90.000	.0247	-.0060	.0977	.1461	-.2601	-.3736	-.4016								
105.000			.1597	.1877	-.3790	-.3966	-.4816								
110.000								-.2534							
120.000	.0534	.0848	.2445	.2608	-.4246	-.4113	-.4446	-.2568							
135.000			.3236	.4311	-.2874	-.2517	-.3252								
150.000	.0657	.1352	.3377	.5247	-.1652	-.1902	-.2783								
165.000	.0661		.3305		.0264	-.1521	-.2430								
180.000	.0638	.1375	.3259	.5557											
320.000	.0346	.1726	.2873	-.0342	-.2855	-.2432	-.2392								

ARC11-019 1A81 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB17)

ALPHA0( 1) = -6.142 BETA0( 3) = .046

SECTION ( 1) ORBITER FUSELAGE		DEPENDENT VARIABLE CP													
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.2186	.5664	.1680	.1214	.1155	.6374		-.5291		-.2860	-.2648	-.1486	-.0453	.0359	.0663
20.000			.1828	.1141	.0968	.2386		-.5475		-.2694					
40.000			.2718	.1053	.0636	.0211		-.8311		-.3094	-.4000	-.1004	-.0338	.0405	.0763
55.000			.3410	.1370	.0556	-.0483		-.4186		-.5219					
70.000			.3783	.1538	.0506	-.0210		-.2919		-.5193	-.8451	-.1325	.0310	.0729	
90.000		.5718	.4257	.1882	.0636	.0095		-.2324		-.5026	-.8926	-.2552	.0421	.0630	
120.000			.4942	.3047	.1827	.1875		.0387		-.5081	-.7846	-.3861	.0203	.0390	
140.000										-.5690					
150.000			.5113	.3799	.3000	.3165				-.8399	-.9148	-.2063	.0226	.0384	
151.000									.2019						
156.000								.5495							
162.000									.2799						
165.000										-.8698	-.8241	-.1567	.0230	.0411	
169.000								.6663							
174.000						.8207									
180.000	1.2186	.7299	.4977	.3985	.3397	.3685		.6526		-.9579	-.9511	-.1044	.0226	.0361	
305.000			.3181	.1567	.0967	-.0475		-.4978		-.2878					
320.000			.2401	.1094	.1013	.0187		-.8155		-.2567	-.3832	-.1273	-.0319	.0289	.0663
340.000			.2233	.1101	.1218	.2568		-.6075		-.2732					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.0659	.1079	.1819	-.0821	-.2972	-.3049	-.2595		-.2392	-.2350					
40.000	.0250	.0483	.0596	-.2458	-.3098	-.2905	-.2744		-.2354	-.2461					
70.000	-.0094	-.0572	.0030	.0801	-.2431	-.4482	-.2909								
90.000	.0265	-.0067	.0741	.1087	-.3094	-.4185	-.4442								
105.000			.1364	.1244	-.4388	-.4345	-.5332								
110.000								-.2440							
120.000	.0486	.0673	.2025	.1785	-.5126	-.4541	-.5384	-.2814							
135.000			.2992	.4242	-.3716	-.2935	-.4044								
150.000	.0639	.1265	.3240	.5256	-.2283	-.2591	-.3123								
165.000	.0662		.3263		-.0313	-.2182	-.2287								
180.000	.0677	.1364	.3289	.5714											
320.000	.0242	.0894	.1370	-.1809	-.3110	-.2721	-.2398								

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## IAB1A - PRESSURE SOURCE DATA TABULATION

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ARC11-019 IAB1 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB17)

ALPHA0 (1) = -6.130 BETA0 (4) = 2.104

## SECTION (1) ORBITER FUSELAGE

## DEPENDENT VARIABLE CP

X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.2117	.5555	.1582	.1080	.1021	.7769		-.5496		-.2788	-.2569	-.1571	-.0546	.0239	.0522
20.000			.1574	.0905	.0747	.1902		-.5987		-.3011					
40.000			.2196	.0683	.0350	-.0161		-.8887		-.3431	-.3665	-.1150	-.0364	.0371	.0599
55.000			.2679	.0763	.0094	-.0847		-.4667		-.5425					
70.000			.3021	.0824	-.0070	-.0647		-.3430		-.5765	-.7682	-.2930	.0380	.0815	
90.000		.4710	.3491	.1142	-.0047	-.0447		-.2848		-.5705	-.5381	-.4544	.0296	.0709	
120.000			.4272	.2422	.1165	.1267		-.0291		-.5999	-.8566	-.4283	-.0307	.0368	
140.000										-.7885					
150.000			.4735	.3511	.2630	.2835				-.8882	-.9225	-.1426	-.0034	.0293	
151.000									.1416						
156.000								.5018							
162.000									.2330						
165.000										-.8717	-.8746	-.1267	.0095	.0316	
169.000								.6425							
174.000							.8061								
180.000	1.2117	.7149	.4953	.3941	.3328	.3605		.6508		-.9579	-.8776	-.1532	.0163	.0351	
305.000			.3880	.2067	.1354	-.0138		-.4243		-.2256					
320.000			.2693	.1250	.1069	.0401		-.6657		-.2408	-.4125	-.1255	-.0163	.0362	.0908
340.000			.2261	.1105	.1154	.2850		-.5735		-.2607					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.0625	.1181	.1973	-.0449	-.3031	-.2860	-.3117		-.2722	-.2531					
40.000	.0435	.1105	.2061	-.0659	-.2809	-.2814	-.2788		-.2833	-.2829					
70.000	-.0012	-.0527	-.0097	.0574	-.2794	-.4819	-.3124								
90.000	.0254	-.0058	.0537	.0776	-.3447	-.4659	-.4122								
105.000			.1129	.0818	-.4789	-.4865	-.5373								
110.000								-.2426							
120.000	.0411	.0548	.1698	.0948	-.5913	-.5419	-.6135	-.2884							
135.000			.2684	.3657	-.4419	-.4069	-.4546								
150.000	.0579	.1125	.3015	.5160	-.2868	-.3461	-.3515								
165.000	.0594		.3099		-.0817	-.2857	-.2342								
180.000	.0617	.1320	.3221	.5733											
320.000	.0228	.0556	.0494	-.3569	-.3211	-.3017	-.2793								

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OF POOR QUALITY



ARC11-019 1A81 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB17)

ALPHA( 1) = -6.123 BETA( 5) = 4.151

SECTION ( 1) ORBITER FUSELAGE		DEPENDENT VARIABLE CP													
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.1967	.5451	.1484	.1047	.0889	.7727		-.4952		-.3260	-.2755	-.1984	-.0758	.0045	.0411
20.000			.1306	.0695	.0510	.1433		-.6033		-.3466					
40.000			.1646	.0403	.0043	-.0617		-.9211		-.3850	-.3478	-.1470	-.0532	.0230	.0521
55.000			.2001	.0270	-.0336	-.1122		-.5009		-.5765					
70.000			.2295	.0255	-.0567	-.0958		-.3752		-.6205	-.4811	-.3947	-.0234	.0935	
90.000		.3727	.2733	.0543	-.0621	-.0900		-.3189		-.6193	-.4933	-.5186	-.1074	.0724	
120.000			.3643	.1877	.0565	.0777		-.0874		-.6668	-.6800	-.4560	-.1158	.0362	
140.000										-.8708					
150.000			.4365	.3268	.2367	.2527				-.9024	-.9033	-.1519	-.0453	.0172	
151.000									.0842						
156.000								.4623							
162.000									.1920						
165.000										-.8518	-.9197	-.1172	-.0257	.0236	
169.000								.6184							
174.000							.7819								
180.000	1.1967	.7014	.4933	.3939	.3338	.3561		.6427		-.9397	-.7974	-.1410	-.0068	.0259	
305.000			.4608	.2653	.1912	.0302		-.3354		-.2123					
320.000			.3029	.1428	.1273	.0670		-.6329		-.2550	-.7037	-.0995	-.0072	.0506	.1197
340.000			.2332	.1117	.1166	.3101		-.5709		-.2522					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.0639	.1460	.2812	.0324	-.3069	-.3075	-.3078		-.2633	-.2440					
40.000	.0593	.1540	.3054	.0160	-.2925	-.2943	-.2862		-.2895	-.2762					
70.000	.0107	-.0462	-.0193	.0362	-.3031	-.5119	-.3226								
90.000	.0248	-.0105	.0372	.0513	-.3675	-.5055	-.4186								
105.000			.0934	.0555	-.5042	-.5176	-.5712								
110.000								-.2389							
120.000	.0359	.0482	.1366	.0273	-.6598	-.6168	-.6748	-.2876							
135.000			.2386	.3330	-.4892	-.4839	-.5042								
150.000	.0461	.1044	.2766	.5296	-.3364	-.4335	-.4126								
165.000	.0469		.2910		-.1194	-.3480	-.2401								
180.000	.0503	.1279	.3115	.5519											
320.000	.0222	.0763	.0795	-.4379	-.3557	-.3029	-.2937								

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## IA81A - PRESSURE SOURCE DATA TABULATION

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ARC11-019 IA81 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB17)

ALPHA0( 2) = -4.089 BETA0( 1) = -6.119

## SECTION ( 1) ORBITER FUSELAGE

## DEPENDENT VARIABLE CP

X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.1882	.5722	.1565	.1002	.0911	.7806		-.4482		-.3179	-.3134	-.1793	-.0804	.0468	.1118
20.000			.2261	.1311	.1025	.3382		-.5160		-.3092					
40.000			.4218	.1901	.1231	.0925		-.6002		-.3949	-.4123	-.1197	-.0308	.0778	.1354
55.000			.5504	.3208	.2115	.0855		-.2013		-.2330					
70.000			.6005	.3571	.2279	.1259		-.0982		-.2130	-.7186	-.1014	.0279	.0835	
90.000		.8256	.6246	.3860	.2431	.1636		-.0329		-.1914	-.6732	-.1784	.0226	.0752	
120.000			.6130	.4276	.3051	.3070		.2283		-.2228	-.5968	-.7090	-.0024	.0248	
140.000										-.1995					
150.000			.5256	.3696	.3059	.3320				-.3004	-.9990	-.3294	-.0062	-.0011	
151.000									.3407						
156.000								.6600							
162.000									.3751						
165.000										-.8959	-.8562	-.2817	-.0221	-.0110	
169.000								.6868							
174.000							.8373								
180.000	1.1882	.6747	.3958	.3117	.2678	.2955		.5400		-1.0620	-.8627	-.1795	-.0444	-.0205	
305.000			.0913	-.0160	-.0364	-.1652		-.6840		-.4073					
320.000			.1185	.0118	.0225	-.1417		-.5647		-.3859	-.3497	-.2019	-.0951	-.0125	.0515
340.000			.1749	.0507	.0825	.1282		-.4741		-.3573					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1209	.2410	.4706	.0453	-.3547	-.2969	-.2996		-.2588	-.2596					
40.000	.0416	.0554	.1471	-.2816	-.4738	-.2991	-.2703		-.2477	-.2390					
70.000	-.0796	-.1498	.0149	.1570	-.1320	-.3684	-.1677								
90.000	-.0392	-.0868	.0907	.2088	-.1739	-.3052	-.2577								
105.000			.1642	.2732	-.2786	-.3216	-.3866								
110.000								-.2943							
120.000	-.0346	.0194	.2755	.3559	-.3029	-.2874	-.3408	-.2405							
135.000			.3372	.3856	-.2215	-.1635	-.2428								
150.000	-.0114	.0796	.3304	.3369	-.1275	-.0964	-.2192								
165.000	-.0060		.2953		.1180	-.0408	-.2421								
180.000	-.0060	.0796	.2618	.4039											
320.000	.1106	.2675	.3963	.0952	-.3041	-.3137	-.2543								

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## 1A81A - PRESSURE SOURCE DATA TABULATION

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ARC11-019 1A81 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB17)

ALPHA0( 2) = -4.079 BETA0( 2) = -4.073

## SECTION ( 1 ) ORBITER FUSELAGE

## DEPENDENT VARIABLE CP

X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.2067	.5850	.1735	.1061	.1047	.7692		-.5376		-.2913	-.2886	-.1553	-.0577	.0489	.0982
20.000			.2225	.1259	.1031	.3093		-.5439		-.2849					
40.000			.3814	.1624	.1047	.0638		-.6645		-.3407	-.4201	-.1099	-.0285	.0685	.1203
55.000			.4823	.2538	.1582	.0392		-.2862		-.2525					
70.000			.5267	.2834	.1639	.0754		-.1740		-.2627	-.7671	-.1248	.0229	.0783	
90.000		.7428	.5576	.3161	.1802	.1141		-.1075		-.2989	-.7149	-.1909	.0237	.0704	
120.000			.5719	.3820	.2616	.2671		.1672		-.3142	-.6412	-.4766	.0270	.0394	
140.000										-.3298					
150.000			.5202	.3660	.2955	.3250				-.5561	-.9807	-.3211	.0258	.0174	
151.000									.2950						
156.000								.6248							
162.000									.3421						
165.000										-.9090	-.8495	-.2617	.0115	.0125	
169.000								.6770							
174.000						.8428									
180.000	1.2067	.6873	.4243	.3343	.2809	.3165		.5810		-1.0520	-.8297	-.2030	-.0074	.0056	
305.000			.1692	.0382	-.0012	-.1255		-.6335		-.3700					
320.000			.1655	.0489	.0484	-.0730		-.5982		-.3405	-.3456	-.1625	-.0618	.0125	.0601
340.000			.1952	.0732	.0941	.1755		-.5594		-.3245					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1244	.2309	.4437	.0359	-.3318	-.2905	-.2958		-.2477	-.2477					
40.000	.0448	.0621	.1321	-.2974	-.4329	-.2769	-.2562		-.2394	-.2230					
70.000	-.0710	-.1374	.0018	.1271	-.1808	-.3914	-.2108								
90.000	-.0299	-.0804	.0772	.1709	-.2371	-.3330	-.3937								
105.000			.1450	.2195	-.3473	-.3429	-.4764								
110.000								-.2694							
120.000	-.0021	.0311	.2502	.3149	-.3801	-.3408	-.3865	-.2371							
135.000			.3252	.3891	-.2681	-.2180	-.2804								
150.000	.0196	.0932	.3221	.3799	-.1585	-.1586	-.2492								
165.000	.0211		.3005		.0577	-.1193	-.2386								
180.000	.0218	.0944	.2777	.4556											
320.000	.0933	.2399	.3655	.0393	-.2928	-.2813	-.2363								

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## IAB1A - PRESSURE SOURCE DATA TABULATION

PAGE 325

ARC11-019 IAB1 LVAP (ELHL SEALED) ORB. FUSELAGE

(RET817)

ALPHA0 ( 2 ) = -4.065 BETA0 ( 3 ) = .030

SECTION ( 1 ) ORBITER FUSELAGE

DEPENDENT VARIABLE CP

X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.2203	.5939	.1717	.1146	.1030	.6333		-.5211		-.2710	-.2457	-.1466	-.0337	.0420	.0773
20.000			.1849	.1058	.0858	.2386		-.5241		-.2740					
40.000			.2792	.1028	.0539	.0184		-.7989		-.3001	-.3824	-.1096	-.0178	.0492	.0907
55.000			.3385	.1328	.0474	-.0480		-.4127		-.4222					
70.000			.3680	.1439	.0344	-.0272		-.2892		-.5057	-.8229	-.1371	.0264	.0643	
90.000		.5586	.4076	.1766	.0447	.0066		-.2258		-.4914	-.8589	-.2102	.0370	.0567	
120.000			.4611	.2784	.1569	.1705		.0446		-.5099	-.7924	-.3921	.0344	.0374	
140.000										-.5843					
150.000			.4677	.3347	.2581	.2857				-.8614	-.9628	-.2609	.0378	.0317	
151.000									.1871						
156.000								.5407							
162.000									.2590						
165.000										-.9095	-.8757	-.1985	.0344	.0301	
169.000								.6498							
174.000							.8068								
180.000	1.2203	.6799	.4448	.3522	.2976	.3337		.6340		-.9415	-1.0056	-.1611	.0336	.0282	
305.000			.3118	.1456	.0905	-.0530		-.4863		-.2255					
320.000			.2488	.1030	.0916	.0123		-.7904		-.2507	-.3763	-.1282	-.0239	.0370	.0830
340.000			.2290	.0976	.1104	.2527		-.5707		-.2595					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.0857	.1167	.1815	-.0902	-.3009	-.3127	-.2504		-.2310	-.2241					
40.000	.0495	.0631	.0715	-.2213	-.3009	-.2906	-.2573		-.2283	-.2317					
70.000	-.0536	-.1146	-.0126	.0693	-.2542	-.4736	-.2596								
90.000	-.0182	-.0548	.0536	.0926	-.3165	-.4454	-.3727								
105.000			.1183	.1299	-.4385	-.4671	-.4903								
110.000								-.2518							
120.000	.0176	.0411	.1944	.1653	-.5196	-.4751	-.5465	-.2633							
135.000			.2762	.3820	-.3979	-.3144	-.4173								
150.000	.0378	.0993	.2986	.4914	-.2678	-.2782	-.3208								
165.000	.0382		.3002		-.0684	-.2497	-.2175								
180.000	.0401	.1141	.3021	.5355											
320.000	.0462	.1103	.1432	-.1596	-.3066	-.2664	-.2335								

ORIGINAL PAGE IS  
OF POOR QUALITY

ARC11-019 IA81 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB17)

ALPHA0( 2) = -4.044 BETA0 ( 4) = 4.123

## SECTION ( 1) ORBITER FUSELAGE

## DEPENDENT VARIABLE CP

X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.1887	.5551	.1402	.0834	.0673	.7560		-.5198		-.3057	-.2646	-.2023	-.0754	.0026	.0431
20.000			.1199	.0470	.0266	.1155		-.5850		-.3270					
40.000			.1492	.0151	-.0209	-.0965		-.7904		-.3468	-.3439	-.1492	-.0556	.0198	.0515
55.000			.1812	.0013	-.0615	-.1429		-.5370		-.5325					
70.000			.2062	-.0021	-.0891	-.1228		-.4043		-.6363	-.4905	-.3431	.0611	.0594	
90.000		.3397	.2515	.0247	-.0895	-.1104		-.3411		-.6359	-.5189	-.5029	-.0115	.0533	
120.000			.3252	.1474	.0207	.0474		-.1030		-.6947	-.7347	-.4752	-.0590	.0213	
140.000										-.9244					
150.000			.3838	.2735	.1805	.2088				-.9609	-.9786	-.1645	-.0313	-.0041	
151.000									.0522						
156.000								.4353							
162.000									.1508						
165.000										-.8859	-.9879	-.1013	-.0263	-.0007	
169.000								.5852							
174.000							.7575								
180.000	1.1887	.6421	.4322	.3337	.2726	.3090		.6050		-1.0725	-.8682	-.1104	-.0141	-.0007	
305.000			.4536	.2563	.1790	.0192		-.3316		-.2443					
320.000			.3011	.1344	.1132	.0517		-.5869		-.2581	-.5778	-.1036	-.0096	.0458	.1222
340.000			.2275	.0960	.0970	.2920		-.5214		-.2719					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.0700	.1513	.2827	.0274	-.3042	-.2976	-.3001		-.2605	-.2317					
40.000	.0742	.1694	.3126	.0228	-.2915	-.2781	-.2747		-.2862	-.2697					
70.000	-.0486	-.1066	-.0561	.0109	-.3287	-.5404	-.2901								
90.000	-.0164	-.0544	.0083	.0263	-.3995	-.5366	-.3745								
105.000			.0650	.0382	-.5362	-.5530	-.4927								
110.000								-.2448							
120.000	.0063	.0117	.1133	.0282	-.6732	-.6432	-.6954	-.2694							
135.000			.2110	.3195	-.5228	-.5192	-.5300								
150.000	.0147	.0715	.2482	.4784	-.3773	-.4766	-.4121								
165.000	.0158		.2582		-.1633	-.3991	-.2314								
180.000	.0139	.0903	.2793	.4926											
320.000	.0335	.0815	.0830	-.4516	-.3440	-.2955	-.2928								

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## IABIA - PRESSURE SOURCE DATA TABULATION

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ARC11-019 IAB1 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB17)

ALPHA0( 2) = -4.041 BETA0 ( 5) = 6.175

## SECTION ( 1) ORBITER FUSELAGE

## DEPENDENT VARIABLE CP

X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.1618	.5446	.1315	.0714	.0469	.6823		-.4904		-.3796	-.3105	-.2590	-.1104	-.0449	.0013
20.000			.0930	.0165	.0001	.0618		-.4905		-.3958					
40.000			.0950	-.0261	-.0562	-.1515		-.5696		-.3981	-.3212	-.1849	-.0896	.0062	.0459
55.000			.1144	-.0513	-.1038	-.1893		-.5784		-.5558					
70.000			.1377	-.0581	-.1342	-.1525		-.4421		-.6779	-.4420	-.4282	-.0563	.0679	
90.000		.2296	.1804	-.0418	-.1449	-.1467		-.3792		-.6821	-.5069	-.5387	-.1062	.0588	
120.000			.2564	.0813	-.0466	.0054		-.1657		-.7590	-.5817	-.4944	-.1326	.0217	
140.000										-.9827					
150.000			.3274	.2287	.1370	.1637				-.9834	-.9736	-.1998	-.0884	-.0208	
151.000									-.0140						
156.000								.3680							
162.000									.0991						
165.000										-.8802	-.9888	-.1354	-.0623	-.0212	
169.000								.5467							
174.000							.7140								
180.000	1.1618	.5940	.4054	.3129	.2504	.2808		.5663		-1.0840	-.8582	-.1490	-.0486	-.0235	
305.000			.5319	.3266	.2353	.0647		-.2240		-.1950					
320.000			.3415	.1611	.1188	.0659		-.5649		-.2363	-.6768	-.0953	-.0101	.0517	.1303
340.000			.2375	.0960	.0814	.3020		-.4666		-.2753					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.0398	.1457	.2808	.0427	-.3217	-.3062	-.3052		-.2567	-.2319					
40.000	.0830	.2010	.3472	.0957	-.3084	-.2830	-.2991		-.2864	-.2799					
70.000	-.0357	-.0936	-.0709	-.0080	-.3529	-.5544	-.3162								
90.000	-.0113	-.0521	-.0159	.0042	-.4214	-.5536	-.3837								
105.000			.0409	.0328	-.5535	-.5776	-.4627								
110.000								-.2363							
120.000	.0039	.0092	.0851	-.0082	-.7224	-.7038	-.7427	-.2664							
135.000			.1776	.2867	-.5631	-.5901	-.5960								
150.000	.0043	.0588	.2165	.4542	-.4206	-.5493	-.4698								
165.000	-.0018		.2389		-.1910	-.4505	-.2401								
180.000	-.0064	.0775	.2721	.4477											
320.000	.0314	.0958	.1018	-.4515	-.3545	-.3075	-.2927								

ARC11-019 IAB1 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB17)

ALPHA0( 3) = -2.003 BETA0 ( 1) = -6.127

SECTION ( 1) ORBITER FUSELAGE				DEPENDENT VARIABLE CP											
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.1804	.5899	.1623	.0951	.0789	.7735		-.4798		-.3056	-.2852	-.1678	-.0689	.0567	.1265
20.000			.2324	.1353	.0912	.3310		-.4303		-.2737					
40.000			.4324	.1991	.1254	.0900		-.5549		-.3706	-.3927	-.1173	-.0188	.0872	.1549
55.000			.5525	.3231	.2117	.0857		-.1814		-.2266					
70.000			.5874	.3495	.2163	.1151		-.0882		-.2053	-.6834	-.1216	.0117	.0651	
90.000		.8036	.6022	.3686	.2279	.1582		-.0231		-.1825	-.6691	-.1891	.0101	.0559	
120.000			.5729	.3911	.2672	.2764		.2205		-.2383	-.6144	-.5940	-.0364	-.0101	
140.000										-.2610					
150.000			.4711	.3181	.2514	.2915				-.3239	-1.0579	-.3533	-.0112	-.0198	
151.000									.3182						
156.000								.6429							
162.000									.3463						
165.000										-.9337	-.9227	-.2560	-.0238	-.0228	
169.000								.6626							
174.000							.8053								
180.000	1.1804	.6219	.3392	.2574	.2194	.2558		.5119		-1.0973	-.9100	-.1781	-.0368	-.0286	
305.000			.0774	-.0351	-.0588	-.1907		-.6603		-.3435					
320.000			.1203	.0003	.0085	-.1608		-.4854		-.3443	-.3601	-.1940	-.0787	.0028	.0710
340.000			.1773	.0425	.0706	.1117		-.4105		-.3374					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1426	.2503	.4708	.0440	-.3249	-.2846	-.2825		-.2327	-.2311					
40.000	.0637	.0755	.1595	-.2772	-.4384	-.2849	-.2461		-.2250	-.2189					
70.000	-.1289	-.2408	-.0216	.1378	-.1375	-.3743	-.1377								
90.000	-.0917	-.1631	.0572	.1889	-.1819	-.3176	-.1611								
105.000			.1338	.2530	-.2824	-.3291	-.1894								
110.000								-.2739							
120.000	-.0955	-.0358	.2587	.3037	-.3271	-.2890	-.2420	-.2289							
135.000			.3214	.3343	-.2550	-.1753	-.2197								
150.000	-.0494	.0469	.3118	.2811	-.1668	-.1201	-.2166								
165.000	-.0383		.2742		.0903	-.0618	-.2308								
180.000	-.0333	.0542	.2388	.3572											
320.000	.1347	.2809	.3983	.1007	-.2857	-.2841	-.2412								

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## IABIA - PRESSURE SOURCE DATA TABULATION

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ARC11-019 IAB1 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB17)

ALPHA0( 3) = -1.993 BETA0 ( 2) = -2.044

## SECTION ( 1) ORBITER FUSELAGE

## DEPENDENT VARIABLE CP

X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.2169	.6179	.1812	.1119	.0981	.7237		-.5607		-.2603	-.2561	-.1498	-.0286	.0636	.1065
20.000			.2161	.1221	.0924	.2814		-.5080		-.2569					
40.000			.3436	.1433	.0810	.0368		-.6353		-.3105	-.3912	-.1125	-.0169	.0685	.1289
55.000			.4179	.1957	.1008	-.0079		-.3385		-.2558					
70.000			.4431	.2105	.0894	.0221		-.2202		-.3011	-.7596	-.1826	.0151	.0549	
90.000		.6407	.4706	.2370	.0953	.0551		-.1513		-.3860	-.7513	-.2801	.0238	.0515	
120.000			.4857	.3015	.1846	.1959		.1184		-.4141	-.6960	-.4110	.0394	.0292	
140.000										-.4730					
150.000			.4481	.3099	.2409	.2012				-.8300	-1.0064	-.3261	.0523	.0223	
151.000									.2353						
156.000								.5839							
162.000									.2893						
165.000										-.9263	-.8825	-.2571	.0420	.0208	
169.000								.6532							
174.000						.8145									
180.000	1.2169	.6376	.3831	.2973	.2466	.2795		.5959		-1.0222	-1.0331	-.2553	.0341	.0197	
305.000			.2328	.0784	.0403	-.0968		-.5562		-.2268					
320.000			.2185	.0746	.0678	-.0297		-.5343		-.2748	-.3321	-.1527	-.0339	.0409	.0887
340.000			.2253	.0856	.1034	.1356		-.5245		-.2831					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1206	.1901	.3357	-.0471	-.3100	-.2623	-.2665			-.2159	-.2140				
40.000	.0750	.0757	.0819	-.4052	-.3297	-.2559	-.2270			-.2148	-.2099				
70.000	-.1086	-.2038	-.0319	.0894	-.2281	-.4519	-.1974								
90.000	-.0665	-.1342	.0440	.1236	-.2903	-.4188	-.2653								
105.000			.1168	.1567	-.4029	-.4447	-.2961								
110.000															
120.000	-.0247	.0022	.2147	.2529	-.4599	-.4347	-.3651			-.2559					
135.000			.2669	.3814	-.3535	-.3025	-.3210			-.2319					
150.000	.0038	.0728	.2734	.4478	-.2384	-.2429	-.2845								
165.000	.0103		.2685		-.0420	-.2065	-.2240								
180.000	.0114	.0842	.2685	.4811											
320.000	.0977	.2185	.3137	.0046	-.2859	-.2353	-.2236								

ORIGINAL PAGE  
OF POOR QUALITY



ARC11-019 IAB1 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB17)

ALPHA( 3) = -1.979 BETA( 3) = 2.069

SECTION ( 1) ORBITER FUSELAGE				DEPENDENT VARIABLE CP											
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4270	.5740
PHI															
.000	1.2090	.6091	.1697	.0938	.0816	.7704		-.5181		-.2466	-.2303	-.1551	-.0451	.0431	.0772
20.000			.1650	.0720	.0537	.1759		-.5467		-.2579					
40.000			.2238	.0571	.0124	-.0397		-.7836		-.2879	-.3453	-.1271	-.0276	.0465	.0857
55.000			.2566	.0575	-.0159	-.1057		-.4717		-.3993					
70.000			.2768	.0544	-.0408	-.0845		-.3447		-.5156	-.8363	-.1797	.0055	.0461	
90.000		.4299	.3150	.0827	-.0385	-.0598		-.2746		-.5456	-.8217	-.3050	.0271	.0381	
120.000			.3637	.1825	.0633	.1019		-.0188		-.6058	-.8743	-.4304	.0195	.0233	
140.000										-.8002					
150.000			.3859	.2609	.1798	.2199				-.9583	-1.0166	-.2647	.0222	.0130	
151.000									.1116						
156.000								.4784							
162.000									.1931						
165.000										-.9387	-.9721	-.1868	.0233	.0103	
169.000								.6088							
174.000						.7738									
180.000	1.2090	.6103	.3875	.2945	.2381	.2859		.6081		-1.0434	-.9744	-.1625	.0229	.0065	
305.000			.3902	.1982	.1316	-.0162		-.3868		-.2529					
320.000			.2915	.1255	.1057	.0309		-.5664		-.2587	-.3902	-.1245	-.0056	.0493	.1201
340.000			.2418	.0973	.1023	.2739		-.5024		-.2541					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.0948	.1385	.2072	-.0273	-.2866	-.2752	-.2959		-.2461	-.2220					
40.000	.0872	.1557	.2523	-.0242	-.2778	-.2614	-.2550		-.2725	-.2572					
70.000	-.1049	-.1688	-.0598	.0289	-.3046	-.5216	-.2661								
90.000	-.0609	-.1053	.0045	.0515	-.3714	-.5063	-.3629								
105.000			.0741	.0787	-.4964	-.5338	-.4617								
110.000								-.2500							
120.000	-.0177	-.0028	.1402	.1019	-.5965	-.5735	-.6225	-.2481							
135.000			.2290	.3338	-.4933	-.4540	-.4927								
150.000	.0053	.0607	.2538	.4477	-.3600	-.4215	-.3629								
165.000	.0045		.2603		-.1460	-.3702	-.2201								
180.000	.0087	.0718	.2630	.4935											
320.000	.0688	.0829	.0683	-.3264	-.2947	-.2863	-.2668								

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## IAB1A - PRESSURE SOURCE DATA TABULATION

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ARC11-019 IAB1 LVAP(ELHL SEALED) ORB. FUSELAGE

(RET817)

ALPHA0( 3) = -1.967 BETA0 ( 4) = 6.153

SECTION ( 1) ORBITER FUSELAGE

DEPENDENT VARIABLE CP

X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.1583	.5665	.1390	.0638	.0354	.6385		-.4938		-.3644	-.2982	-.2557	-.1122	-.0308	.0186
20.000			.0954	.0075	-.0146	-.0098		-.4262		-.3739					
40.000			.0923	-.0376	-.0754	-.1754		-.4925		-.3667	-.3354	-.1789	-.0788	.0102	.0549
55.000			.1024	-.0732	-.1231	-.2013		-.5820		-.4242					
70.000			.2076	-.0820	-.1579	-.1706		-.4436		-.6248	-.4497	-.3983	-.0392	.0486	
90.000		.2067	.1620	-.0586	-.1655	-.1559		-.3739		-.6691	-.5103	-.5230	-.0605	.0520	
120.000			.2287	.0576	-.0677	-.0078		-.1564		-.7640	-.5702	-.5310	-.0885	.0205	
140.000										-1.0094					
150.000			.2864	.1850	.0922	.1333				-1.0374	-1.0289	-.2560	-.0631	-.0216	
151.000									-.0248						
156.000								.3579							
162.000									.0816						
165.000										-.9210	-1.0378	-.1841	-.0513	-.0312	
169.000								.5315							
174.000							.6809								
180.000	1.1583	.5411	.3515	.2608	.1995	.1109		.5486		-1.1180	-.9035	-.1852	-.0103	-.0339	
305.000			.5381	.3277	.2335	.0720		-.1825		-.1761					
320.000			.3594	.1699	.1312	.0631		-.4855		-.2225	-.6484	-.0997	-.0046	.0595	.1438
340.000			.2458	.0920	.0787	.3026		-.4144		-.2690					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.0626	.1570	.2914	.0452	-.3257	-.3008	-.3063		-.2621	-.2288					
40.000	.1128	.2209	.3569	.1091	-.3165	-.2775	-.2913		-.2798	-.2733					
70.000	-.0822	-.1414	-.1002	-.0244	-.3643	-.5690	-.2829								
90.000	-.0415	-.0859	-.0328	-.0125	-.4339	-.5748	-.3484								
105.000			.0238	.0219	-.5639	-.5969	-.4178								
110.000								-.2374							
120.000	-.0182	-.0148	.0717	.0266	-.7085	-.7080	-.7435	-.2600							
135.000			.1634	.2741	-.5740	-.6098	-.6065								
150.000	-.0174	.0361	.2039	.3923	-.4498	-.5807	-.4545								
165.000	.2339		.2203		-.2244	-.4864	-.2401								
180.000	-.0327	.0522	-.2293	.3969											
320.000	.0510	.1092	.1140	-.4442	-.3440	-.3090	-.2887								

ARC11-019 IAB1 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB17)

ALPHA( 4) = .077 BETA( 1) = -6.130

## SECTION ( 1) ORBITER FUSELAGE

## DEPENDENT VARIABLE CP

X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.1798	.6221	.1781	.0893	.0767	.7673		-.4577		-.2821	-.2694	-.1562	-.0583	.0751	.1425
20.000			.2510	.1350	.0965	.3371		-.3813		-.2537					
40.000			.4552	.2115	.1369	.0937		-.4896		-.2994	-.3565	-.1119	-.0083	.1054	.1806
55.000			.5650	.3338	.2211	.0241		-.1522		-.1915					
70.000			.5891	.3528	.2157	.0479		-.0703		-.1790	-.6310	-.1666	-.0094	.0546	
90.000		.7946	.5918	.3608	.2142	.1537		-.0077		-.1624	-.6536	-.2465	-.0121	.0425	
120.000			.5402	.3532	.2317	.2487		.2264		-.2335	-.6066	-.7045	-.0776	-.0518	
140.000										-.2984					
150.000			.4230	.2656	.2052	.2483				-.3627	-1.0813	-.4499	.0065	-.0410	
151.000									.3169						
156.000								.6347							
162.000									.3362						
165.000										-.9521	-1.0018	-.4048	.0046	-.0391	
169.000								.6491							
174.000							.8000								
180.000	1.1798	.5720	.2867	.2119	.1691	.2137		.4898		-1.1058	-.9200	-.2681	-.0075	-.0337	
305.000			.0713	-.0531	-.0743	-.2374		-.6131		-.3042					
320.000			.1217	-.0082	-.0044	-.1685		-.4345		-.3199	-.3355	-.1977	-.0753	.0117	.0906
340.000			.1841	.0371	.0595	.1068		-.3862		-.3084					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1619	.2672	.4800	.0592	-.3280	-.2911	-.2844		-.2370	-.2172					
40.000	.0898	.1040	.1826	-.2713	-.4350	-.2930	-.2439		-.2237	-.2088					
70.000	-.1771	-.3339	-.0664	.1282	-.1320	-.3699	-.1352								
90.000	-.1375	-.2626	.0200	.1780	-.1720	-.3136	-.1684								
105.000			.1053	.2336	-.2717	-.3250	-.1825								
110.000								-.2695							
120.000	-.1699	-.1197	.2511	.2452	-.3387	-.2947	-.2451	-.2294							
135.000			.3117	.2768	-.2938	-.1977	-.2321								
150.000	-.0940	.0086	.2972	.2262	-.2020	-.1352	-.2267								
165.000	-.0719		.2599		.0747	-.0787	-.2348								
180.000	-.0593	.0349	.2252	.3034											
320.000	.1688	.2957	.4099	.1124	-.2903	-.2962	-.2393								

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ARC11-019 IAB1 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB17)

ALPHA0 ( 4 ) = .082 BETA0 ( 2 ) = -4.088

SECTION ( 1 ) ORBITER FUSELAGE		DEPENDENT VARIABLE CP													
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.2036	.6384	.1870	.0999	.0885	.7709		-.4675		-.2495	-.2411	-.1367	-.0358	.0722	.1357
20.000			.2458	.1303	.0934	.3096		-.4104		-.2416					
40.000			.4102	.1812	.1105	.0655		-.5196		-.2811	-.3657	-.1062	-.0060	.0941	.1676
55.000			.4969	.2640	.1584	-.0313		-.2333		-.2295					
70.000			.5131	.2773	.1470	-.0159		-.1342		-.2208	-.6983	-.1683	-.0079	.0514	
90.000		.7102	.5224	.2928	.1550	.1037		-.0747		-.2190	-.6925	-.2781	-.0075	.0427	
120.000			.4992	.3129	.1153	.1677		.1774		-.3028	-.6468	-.6028	-.0320	-.0113	
140.000										-.3737					
150.000			.4168	.2678	.1280	.2460			.2776	-.6266	-1.0613	-.4186	.0306	-.0094	
151.000															
156.000								.6106							
162.000									.3115						
165.000										-.9482	-.9154	-.3687	.0431	-.0052	
169.000								.6483							
174.000							.8063								
180.000	1.2036	.5789	.3131	.2362	.1075	.2379		.5398		-1.0838	-.9192	-.2604	.0288	-.0048	
305.000			.1538	.0118	-.0976	-.1532		-.5464		-.2708					
320.000			.1721	.0353	.0269	-.0957		-.3987		-.2815	-.3036	-.1766	-.0486	.0426	.0958
340.000			.2100	.0631	.0778	.1457		-.3734		-.2838					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1661	.2581	.4562	.0509	-.3194	-.2799	-.2694		-.2252	-.2195					
40.000	.0951	.1065	.1612	-.3210	-.4052	-.2734	-.2408		-.2248	-.2085					
70.000	-.1716	-.3103	-.0788	.0961	-.1895	-.3870	-.1690								
90.000	-.1260	-.2351	.0098	.1349	-.2473	-.3342	-.2344								
105.000			.0992	.1729	-.3577	-.3410	-.3348								
110.000								-.2637							
120.000	-.1139	-.0867	.2243	.1950	-.4401	-.3279	-.3405	-.2192							
135.000			.2897	.2683	-.3801	-.2397	-.2823								
150.000	-.0523	.0243	.2813	.2375	-.2594	-.1933	-.2549								
165.000	-.0406		.2566		.0056	-.1606	-.2309								
180.000	-.0322	.0463	.2326	.3617											
320.000	.1513	.2745	.3844	.0606	-.2780	-.2675	-.2218								

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OF POOR QUALITY

ARC11-019 IAB1 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB17)

ALPHA0 ( 4 ) = .083 BETA0 ( 3 ) = .004

## SECTION ( 1 ) ORBITER FUSELAGE

## DEPENDENT VARIABLE CP

X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2340	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.2140	.6372	.1815	.0992	.0838	.6122		-.4711		-.2260	-.2020	-.1252	-.0256	.0655	.1006
20.000			.1982	.0916	.0663	.2261		-.4427		-.2294					
40.000			.2892	.0942	.0438	-.0021		-.5702		-.2607	-.3373	-.1102	-.0085	.0678	.1175
55.000			.3359	.1176	.0331	-.0666		-.3893		-.2766					
70.000			.3503	.1164	.0121	-.0415		-.2754		-.3042	-.7916	-.1661	-.0077	.0340	
90.000		.5146	.3716	.1393	.0174	-.0052		-.2043		-.3552	-.4346	-.2310	.0022	.0317	
120.000			.3938	.2138	.0929	.1355		.0557		-.5106	-.7594	-.3749	.0336	.0166	
140.000										-.5988					
150.000			.3763	.2410	.1685	.2235				-.9278	-1.0317	-.3552	.0492	.0073	
151.000									.1717						
156.000								.5249							
162.000									.2310						
165.000										-.9661	-.9486	-.2162	.0317	.0096	
169.000								.6188							
174.000							.7768								
180.000	1.2140	.5722	.3425	.2540	.1994	.2609		.5949		-1.0282	-1.0757	-.1786	.0306	.0066	
305.000			.3118	.1285	.0739	-.0662		-.3678		-.2675					
320.000			.2616	.0972	.0786	-.0064		-.4951		-.2637	-.3048	-.1349	-.0085	.0528	.1282
340.000			.2360	.0888	.0832	.2385		-.4391		-.2442					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1175	.1395	.1783	-.0881	-.3146	-.2772	-.2512		-.1879	-.1845					
40.000	.0914	.1047	.0899	.0000	-.3276	-.2646	-.2458		-.1936	-.1834					
70.000	-.1705	-.2711	-.0936	.0448	-.2787	-.5030	-.1969								
90.000	-.1138	-.1905	-.0072	.0704	-.3516	-.4878	-.2550								
105.000			.0624	.1070	-.4719	-.5229	-.3097								
110.000								-.2486							
120.000	-.0557	-.0462	.1332	.2205	-.5221	-.5285	-.5035	-.2341							
135.000			.2071	.4004	-.4157	-.3973	-.4213								
150.000	-.0240	.0318	.2357	.4389	-.3287	-.3621	-.3273								
165.000	-.0156		.2392		-.1300	-.3250	-.2077								
180.000	-.0152	.0445	.2441	.4584											
320.000	.0955	.1404	.1552	-.1259	-.2871	-.2581	-.2341								

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ARC11-019 IA81 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB17)

ALPHAO( 4) = .096 BETA0 ( 4) = 4.096

SECTION ( 1) ORBITER FUSELAGE				DEPENDENT VARIABLE CP											
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.1860	.6083	.1556	.0775	.0508	.7548		-.4602		-.2776	-.2301	-.1786	-.0610	.0252	.0760
20.000			.1303	.0393	.0103	.1081		-.4206		-.2769					
40.000			.1560	.0095	-.0409	-.1088		-.3870		-.2776	-.3059	-.1402	-.0458	.0358	.0810
55.000			.1684	-.0191	-.0856	-.1612		-.5125		-.2727					
70.000			.1817	-.0310	-.1124	-.1351		-.3866		-.3662	-.8586	-.2257	-.0143	.0301	
90.000		.3013	.2179	-.0065	-.1200	-.1131		-.3144		-.5816	-.6942	-.3818	.0183	.0267	
120.000			.2689	.0958	-.0206	.0330		-.0781		-.6750	-.9257	-.4706	.0035	.0153	
140.000										-.9278					
150.000			.2982	.1897	.1065	.1491				-1.0342	-1.0553	-.2573	.0073	-.0026	
151.000									.0399						
156.000								.4217							
162.000									.1239						
165.000										-.9653	-1.0729	-.1927	.0058	-.0080	
169.000								.5593							
174.000							.7233								
180.000	1.1860	.5351	.3340	.2392	.1828	.2362		.5684		-1.1100	-.9376	-.2159	.0168	-.0129	
305.000			.4680	.2587	.1874	-.0333		-.2267		-.1941					
320.000			.3401	.1456	.1246	.0519		-.4741		-.2186	-.3902	-.0975	.0077	.0734	.1562
340.000			.2527	.0890	.0919	.2941		-.3965		-.2496					
X/LB															
	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1066	.1778	.3023	.0409	-.3206	-.2996	-.2983		-.2348	-.2089					
40.000	.1284	.2084	.3309	.0416	-.2974	-.2706	-.2585		-.2478	-.2436					
70.000	-.1420	-.2171	-.1084	-.0084	-.3404	-.5560	-.2570								
90.000	-.0970	-.1498	-.0359	.0114	-.4144	-.5541	-.3292								
105.000			.0317	.0344	-.5405	-.5846	-.4168								
110.000								-.2133							
120.000	-.0489	-.0409	.0904	.0693	-.6537	-.6480	-.6954	-.2263							
135.000			.1781	.3120	-.5537	-.5494	-.5603								
150.000	-.0301	.0275	.1983	.4405	-.4217	-.5119	-.4165								
165.000	-.0336		.2075		-.2153	-.4485	-.2420								
180.000	-.0370	.0435	.2285	.3867											
320.000	.0758	.1130	.1081	-.4483	-.3381	-.2937	-.2799								

ARC11-019 IAB1 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB17)

ALPHA0( 4) = .101 BETA0 ( 5) = 6.143

## SECTION ( 1) ORBITER FUSELAGE

## DEPENDENT VARIABLE CP

X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.1540	.5932	.1440	.0642	.0296	.6604		-.4384		-.3395	-.2703	-.2352	-.0939	-.0158	.0386
20.000			.0988	.0052	-.0250	.0486		-.4209		-.3349					
40.000			.0875	-.0390	-.0872	-.1721		-.4193		-.3103	-.3200	-.1666	-.0704	.0184	.0749
55.000			.0965	-.0809	-.1422	-.2071		-.5564		-.3099					
70.000			.1101	-.0916	-.1750	-.1755		-.4406		-.4161	-.6555	-.3261	-.0378	.0302	
90.000		.1848	.1448	-.0710	-.1781	-.1624		-.3663		-.6511	-.5224	-.4692	-.0177	.0343	
120.000			.1997	.0349	-.0817	-.0927		-.1486		-.7493	-.5872	-.5109	-.0386	.0172	
140.000										-1.0072					
150.000			.2410	.1476	.0598	.1047				-1.0608	-1.0639	-.2800	-.0348	-.0187	
151.000									-.0427						
156.000								.3478							
162.000									.0617						
165.000										-.9364	-1.0731	-.2034	-.0291	-.0301	
169.000							.6489	.5175							
174.000															
180.000	1.1540	.4879	.3025	.2136	.1613	.2207		.5262		-1.1296	-.9289	-.2296	-.0219	-.0332	
305.000			.5495	.3324	.2459	.0777		-.1384		-.1440					
320.000			.3827	.1755	.1455	.0781		-.3797		-.1915	-.4618	-.0848	.0108	.0814	.1669
340.000			.2619	.0938	.0829	.3016		-.3357		-.2508					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.0844	.1708	.3059	.0511	-.3191	-.2889	-.2979		-.2333	-.2035					
40.000	.1421	.2339	.3646	.1081	-.3176	-.2617	-.2734		-.2451	-.2531					
70.000	-.1256	-.1944	-.1253	-.0384	-.3671	-.5754	-.2620								
90.000	-.0818	-.1308	-.0532	-.0219	-.4380	-.5796	-.3204								
105.000			.0056	.0156	-.5660	-.6120	-.3838								
110.000								-.2162							
120.000	-.0459	-.0364	.0552	.0769	-.6976	-.7009	-.7320	-.2308							
135.000			.1429	.2793	-.5757	-.6123	-.6156								
150.000	-.0390	.0209	.1854	.3303	-.4661	-.5898	-.4410								
165.000	-.0489		.2029		-.2514	-.5057	-.2442								
180.000	-.0581	.0357	.2255	.3490											
320.000	.0743	.1311	.1307	-.4334	-.3332	-.3055	-.2798								

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## 1A81A - PRESSURE SOURCE DATA TABULATION

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ARC11-019 1A81 LVAP (ELHL SEALED) ORB. FUSELAGE

(RETB17)

ALPHA0 ( 5 ) = 2.172 BETA0 ( 1 ) = -6.124

SECTION ( 1 ) ORBITER FUSELAGE				DEPENDENT VARIABLE CP											
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.1701	.6469	.1896	.0943	.0787	.7697		-.4203		-.2607	-.2489	-.1399	-.0544	.0881	.1551
20.000			.2728	.1465	.1008	.3358		-.3193		-.2437					
40.000			.4793	.2307	.1518	.1034		-.4137		-.2384	-.2508	-.0821	-.0029	.1204	.1975
55.000			.5777	.3435	.2315	.0945		-.1270		-.1564					
70.000			.5886	.3458	.2147	.1211		-.0514		-.1572	-.5771	-.1674	-.0313	.0476	
90.000		.7749	.5750	.3443	.2075	.1495		.0015		-.1496	-.6437	-.2463	-.0381	.0347	
120.000			.5038	.3157	.1876	.2169		.2237		-.2371	-.6169	-.6653	-.1473	-.0920	
140.000										-.3151					
150.000			.3724	.2147	.1611	.2126				-.3931	-1.1115	-.5007	-.0355	-.0496	
151.000									.3026						
156.000								.6219							
162.000									.3177						
165.000										-.9795	-1.0377	-.4924	-.0161	-.0454	
169.000								.6313							
174.000							.7713								
180.000	1.1701	.5159	.2371	.1667	.1191	.1826		.4696		-1.1253	-.9547	-.4241	.0055	-.0332	
305.000			.0636	-.0547	-.0771	-.2117		-.5248		-.2994					
320.000			.1290	-.0055	-.0059	-.1744		-.3835		-.3082	-.3113	-.2054	-.0620	.0268	.1058
340.000			.1953	.0417	.0634	.1007		-.3442		-.2925					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1750	.2777	.4805	.0630	-.3252	-.2791	-.2769			-.2287	-.2108				
40.000	.1112	.1307	.1957	-.2585	-.4162	-.2856	-.2349			-.2112	-.2081				
70.000	-.2158	-.4235	-.1086	.1163	-.1290	-.3720	-.1318								
90.000	-.1779	-.3609	-.0202	.1651	-.1683	-.3138	-.1712								
105.000			.0729	.2082	-.2635	-.3294	-.1792								
110.000								-.2506							
120.000	-.2306	-.1956	.2353	.1859	-.3473	-.3025	-.2223	-.2128							
135.000			.2895	.2141	-.3206	-.2170	-.2258								
150.000	-.1222	-.0194	.2727	.1658	-.2334	-.1536	-.2242								
165.000	-.0966		.2330		.0591	-.0914	-.2284								
180.000	-.0786	.0157	.2014	.2385											
320.000	.1880	.3020	.4107	.1094	-.2768	-.2861	-.2162								



ARC11-019 IA81 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB17)

ALPHA( 5) = 2.177 BETA( 2) = -2.050

## SECTION ( 1) ORBITER FUSELAGE

## DEPENDENT VARIABLE CP

X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.2079	.6671	.2038	.1030	.0849	.7152		-.4402		-.2203	-.1919	-.1143	-.0120	.0831	.1293
20.000			.2428	.1182	.0831	.2619		-.3476		-.2161					
40.000			.3720	.1501	.0857	.0183		-.4460		-.2112	-.3086	-.1052	-.0014	.0914	.1598
55.000			.4242	.1976	.0986	-.0269		-.2903		-.2444					
70.000			.4253	.1919	.0724	.0020		-.1903		-.2542	-.7242	-.1906	-.0320	.0307	
90.000		.6032	.4338	.2037	.0717	.0406		-.1213		-.2764	-.7486	-.2657	-.0256	.0276	
120.000			.4168	.2330	.1098	.1566		.1230		-.3926	-.6990	-.3855	-.0406	-.0090	
140.000										-.4872					
150.000			.3546	.2117	.1484	.2033			.2193	-.8742	-1.0989	-.4602	.0095	.0004	
151.000															
156.000								.5627							
162.000									.2581						
165.000										-.9852	-.9415	-.4346	.0439	.0080	
169.000								.6196							
174.000							.7952								
180.000	1.2079	.5296	.2795	.2057	.1449	.2172		.5563		-1.1024	-1.0795	-.2922	.0242	.0080	
305.000			.2351	.0709	.0241	-.1244		-.3819		-.2705					
320.000			.2319	.0758	.0627	-.0570		-.2670		-.2609	-.2691	-.1490	-.0124	.0593	.1095
340.000			.2398	.0815	.0804	.1933		-.3450		-.2522					
X/LB	.6320	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1457	.2021	.3327	-.0425	-.3176	-.2767	-.2717		-.2233	-.2142					
40.000	.1084	.1094	.0927	-.3813	-.3430	-.2649	-.2405		-.2191	-.2096					
70.000	-.2062	-.3789	-.1276	.0470	-.2439	-.4410	-.1691								
90.000	-.1547	-.2987	-.0281	.0660	-.3126	-.4000	-.2561								
105.000			.0710	.0914	-.4209	-.3970	-.3497								
110.000								-.2406							
120.000	-.1186	-.1120	.1732	.1095	-.5074	-.3745	-.3962	-.2129							
135.000			.2268	.2881	-.4444	-.2934	-.3171								
150.000	-.0590	-.0038	.2143	.3572	-.3195	-.2774	-.2730								
165.000	-.0460		.2014		-.1036	-.2507	-.2167								
180.000	-.0396	.0190	.2022	.4241											
320.000	.1409	.2381	.3296	.0153	-.2748	-.2374	-.2121								

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## 1A81A - PRESSURE SOURCE DATA TABULATION

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ARC11-019 1A81 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB17)

ALPHA( 5) = 2.180 BETA( 3) = 2.054

## SECTION ( 1) ORBITER FUSELAGE

## DEPENDENT VARIABLE CP

X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.1995	.6570	.1962	.0933	.0781	.7690		-.4529		-.2164	-.1931	-.1304	-.0319	.0617	.1042
20.000			.1947	.0746	.0478	.1706		-.4249		-.2288					
40.000			.2434	.0597	.0137	-.0524		-.2845		-.2330	-.2928	-.1483	-.0186	.0693	.1099
55.000			.2623	.0483	-.0224	-.1237		-.4082		-.2609					
70.000			.2651	.0387	-.0558	-.0879		-.3293		-.3189	-.8022	-.1997	-.0289	.0236	
90.000		.3934	.2859	.0578	-.0577	-.0573		-.2557		-.3815	-.8327	-.2579	-.0110	.0236	
120.000			.3095	.1243	.0138	.0823		-.0053		-.5852	-.8060	-.4342	.0221	.0146	
140.000										-.7469					
150.000			.3018	.1701	.1005	.1718				-1.0132	-1.0599	-.4418	.0470	.0021	
151.000									.1051						
156.000								.4625							
162.000									.1707						
165.000										-1.0047	-1.0135	-.3252	.0282	.0006	
169.000								.5775							
174.000							.7421								
180.000	1.1995	.4977	.2921	.2082	.1486	.2151		.5680		-1.1274	-1.0348	-.2944	.0206	-.0029	
305.000			.4012	.2033	.1321	-.0106		-.2663		-.2207					
320.000			.3186	.1377	.1120	.0330		-.4312		-.2242	-.2948	-.1238	.0135	.0694	.1509
340.000			.2625	.1047	.0955	.2793		-.3475		-.2345					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1275	.1713	.2274	-.0091	-.3019	-.2982	-.2966		-.2377	-.2140					
40.000	.1279	.1926	.2714	-.0117	-.2859	-.2614	-.2500		-.2404	-.2343					
70.000	-.2083	-.3146	-.1409	.0091	-.3210	-.5364	-.2275								
90.000	-.1425	-.2336	-.0571	.0285	-.3966	-.5238	-.3146								
105.000			.0079	.0650	-.5211	-.5660	-.3979								
110.000								-.2128							
120.000	-.0729	-.0954	.0656	.1724	-.5652	-.6085	-.6096	-.2102							
135.000			.1710	.3381	-.4726	-.5003	-.5169								
150.000	-.0429	-.0055	.1991	.3633	-.3907	-.4724	-.3776								
165.000	-.0422		.2010		-.1901	-.4247	-.2257								
180.000	-.0441	.0075	.1995	.4232											
320.000	.1075	.1092	.0893	-.3275	-.3107	-.2890	-.2679								

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ARC11-019 IA81 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB17)

ALPHA0( 5) = 2.179 BETA0( 4) = 6.141

SECTION ( 1) ORBITER FUSELAGE		DEPENDENT VARIABLE CP													
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.1404	.6164	.1555	.0636	.0217	.6454		-.4313		-.3231	-.2590	-.2333	-.0886	-.0101	.0471
20.000			.1050	.0029	-.0306	.0343		-.4348		-.3124					
40.000			.0916	-.0436	-.0918	-.1866		-.3616		-.2895	-.3025	-.1680	-.0608	.0266	.0867
55.000			.0869	-.0889	-.1511	-.2242		-.4679		-.3140					
70.000			.0924	-.1020	-.1873	-.1882		-.4466		-.3877	-.8696	-.2619	-.0314	.0136	
90.000		.1625	.1234	-.0839	-.1876	-.1617		-.3654		-.4793	-.5272	-.4139	.0049	.0167	
120.000			.1716	.0094	-.1056	-.0301		-.1445		-.7517	-.7156	-.4548	-.0093	.0117	
140.000										-1.0221					
150.000			.1994	.1050	.0215	.0880				-1.1057	-1.1017	-.3190	-.0097	-.0216	
151.000									-.0558						
156.000								.3367							
162.000									.0389						
165.000										-1.0183	-1.1133	-.2717	-.0070	-.0305	
169.000								.4982							
174.000						.6352									
180.000	1.1404	.4319	.2500	.1646	.1118	.1828		.4979		-1.1647	-.9824	-.4029	.0033	-.0420	
305.000			.5619	.3443	.2571	.0872		-.0946		-.1230					
320.000			.4042	.1888	.1517	.0701		-.2674		-.1754	-.3526	-.0756	.0175	.0882	.1797
340.000			.2748	.0976	.0792	.2915		-.2731		-.2428					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.0952	.1774	.3082	.0410	-.3116	-.2916	-.2895		-.2233	-.1937					
40.000	.1574	.2379	.3604	.1049	-.3090	-.2505	-.2622		-.2475	-.2425					
70.000	-.1688	-.2527	-.1603	-.0556	-.3853	-.5857	-.2449								
90.000	-.1229	-.1803	-.0874	-.0341	-.4582	-.5969	-.2802								
105.000			-.0217	.0102	-.5851	-.6342	-.3091								
110.000									-.2173						
120.000	-.0686	-.0685	.0351	.0973	-.6987	-.7144	-.6563		-.2196						
135.000			.1157	.3190	-.5865	-.6282	-.6147								
150.000	-.0594	.0006	.1569	.2910	-.4808	-.6125	-.4289								
165.000	-.0713		.1811		-.2870	-.5398	-.2408								
180.000	-.0821	.0159	.2015	.2729											
320.000	.0908	.1423	.1426	-.4451	-.3300	-.3022	-.2732								

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ARC11-019 IAB1 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB17)

ALPHA0( 6) = 4.252 BETA0( 1) = -6.110

SECTION ( 1) ORBITER FUSELAGE				DEPENDENT VARIABLE CP											
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.1623	.6748	.2078	.1028	.0769	.7609		-.4094		-.2599	-.2298	-.1309	-.0433	.0987	.1656
20.000			.2964	.1575	.1029	.3290		-.3006		-.2403					
40.000			.5023	.2498	.1634	.1077		-.3779		-.2183	-.2065	-.0692	.0145	.1332	.2150
55.000			.5902	.3603	.2412	.0989		-.1044		-.1396					
70.000			.5851	.3486	.2107	.1147		-.0459		-.1490	-.5505	-.1730	-.0430	.0415	
90.000		.7614	.5587	.3372	.1935	.1436		.0065		-.1422	-.6390	-.2459	-.0550	.0225	
120.000			.4666	.2787	.1618	.1894		.2136		-.2370	-.6321	-.6278	-.2205	-.1356	
140.000										-.3290					
150.000			.3228	.1678	.1073	.1794				-.4187	-.8439	-.5353	-.1060	-.0531	
151.000									.2882						
156.000								.6108							
162.000									.2969						
165.000										-1.0129	-.7294	-.5368	-.0912	-.0413	
167.000								.6142							
174.000						.7601									
180.000	1.1623	.4645	.1883	.1215	.0870	.1513		.4475		-.1476	-.8339	-.5118	-.0624	-.0280	
305.000			.0636	-.0535	-.0795	-.2178		-.4217		-.2950					
320.000			.1389	-.0027	-.0085	-.1835		-.3398		-.2988	-.2982	-.2024	-.0582	.0344	.1219
340.000			.2088	.0438	.0682	.1032		-.3356		-.2828					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1880	.2780	.4763	.0693	-.3249	-.2794	-.2653		-.2230	-.2032					
40.000	.1314	.1426	.2067	-.2725	-.4097	-.2974	-.2311		-.2097	-.2036					
70.000	-.2333	-.4943	-.1409	.0991	-.1243	-.3820	-.1381								
90.000	-.2089	-.4241	.0652	.1414	-.1558	-.3259	-.1739								
105.000			.0462	.1632	-.2482	-.3404	-.1842								
110.000								-.2432							
120.000	-.2920	-.2633	.2086	.1208	-.3538	-.3175	-.2348	-.2115							
135.000			.2368	.1375	-.3717	-.2391	-.2444								
150.000	-.1459	-.0306	.2239	.1018	-.2741	-.1773	-.2329								
165.000	-.1215		.1895		.0286	-.1122	-.2348								
180.000	-.1028	-.0123	.1624	.2010											
320.000	.2036	.3033	.4028	.1026	-.2859	-.2848	-.2157								

ARC11-019 IA81 LVAP(ELHL SEALED) ORB. FUSELAGE

(RET917)

ALPHA0( 6) = 4.257 BETA0 ( 2) = -4.071

SECTION ( 1) ORBITER FUSELAGE				DEPENDENT VARIABLE CP											
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.1886	.6898	.2188	.1105	.0929	.7725		-.4039		-.2240	-.1950	-.1131	-.0237	.0907	.1625
20.000			.2837	.1476	.1012	.3130		-.3025		-.2210					
40.000			.4493	.2083	.1315	.0737		-.4041		-.2022	-.2365	-.0864	.0091	.1193	.1975
55.000			.5141	.2830	.1728	.0400		-.1768		-.1781					
70.000			.5103	.2736	.1376	.0609		-.1113		-.1898	-.6309	-.1929	-.0463	.0324	
90.000		.6786	.4964	.2709	.1274	.0972		-.0518		-.1841	-.6909	-.2622	-.0568	.0204	
120.000			.4311	.2451	.1315	.1718		.1744		-.2966	-.6636	-.4800	-.1566	-.0738	
140.000										-.3952					
150.000			.3234	.1727	.1208	.1883				-.5938	-.7860	-.5117	-.0734	-.0209	
151.000									.2554						
156.000								.5888							
162.000									.2779						
165.000										-1.0060	-.7263	-.5260	-.0692	-.0110	
169.000								.6155							
174.000							.7819								
180.000	1.1886	.4742	.2142	.1490	.1055	.1783		.5030		-1.1332	-.8696	-.4548	-.0165	.0031	
305.000			.1544	.0133	-.0255	-.1625		-.4346		-.2726					
320.000			.1996	.0448	.0315	-.0998		-.2939		-.2654	-.2560	-.1763	-.0335	.0585	.1219
340.000			.2341	.0721	.0775	.1600		-.2894		-.2616					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1910	-.2772	.4638	.0644	-.3242	-.2841	-.2727			-.2116	-.2085				
40.000	.1348	.1414	.1901	-.3239	-.3958	-.2716	-.2313			-.2093	-.1922				
70.000	-.2335	-.4761	-.1541	.0568	-.1691	-.4011	-.1960								
90.000	-.1939	-.3987	-.0631	.0746	-.2093	-.3519	-.3061								
105.000			.0573	.0943	-.3018	-.3591	-.4279								
110.000								-.2288							
120.000	-.2162	-.2084	.1848	.0762	-.4155	-.3573	-.3627	-.2027							
135.000			.2187	.1748	-.4268	-.2750	-.2978								
150.000	-.1078	-.0338	.2107	.1543	-.3227	-.2286	-.2580								
165.000	-.0911		.1800		-.0466	-.1911	-.2201								
180.000	-.0759	-.0149	.1538	.3382											
320.000	.1915	.2930	.3908	.0697	-.2792	-.2639	-.2049								

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ARC11-019 IAB1 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB17)

ALPHA0( 6) = 4.252 BETA0 ( 3) = .005

## SECTION ( 1) ORBITER FUSELAGE

## DEPENDENT VARIABLE CP

X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4370	.5740
PHI															
.000	1.2015	.6905	.2191	.1083	.0874	.6065		-.4178		-.2113	-.1724	-.1000	-.0078	.0865	.1277
20.000			.2397	.1113	.0740	.2120		-.3694		-.2060					
40.000			.3211	.1213	.0539	-.0181		-.3626		-.2147	-.2620	-.1225	-.0006	.0891	.1479
55.000			.3452	.1297	.0402	-.0868		-.3008		-.2479					
70.000			.3390	.1113	.0010	-.0493		-.2359		-.2868	-.7454	-.2207	-.0514	.0184	
90.000		.4807	.3456	.1197	-.0047	-.0101		-.1711		-.3231	-.7866	-.2510	-.0408	.0142	
120.000			.3285	.1552	.0432	.0998		.0652		-.4724	-.7587	-.4127	-.0391	-.0081	
140.000										-.5988					
150.000			.2889	.1568	.0867	.1598				-.9586	-.6954	-.5011	-.0020	.0042	
151.000									.1557						
156.000								.5066							
162.000									.1992						
165.000										-1.0265	-.8645	-.4685	.0222	.0088	
169.000								.5855							
174.000							.7406								
180.000	1.2015	.4652	.2424	.1718	.1118	.1897		.5540		-1.1633	-.96.5	-.3789	-.0001	.0069	
305.000			.3250	.1479	.0813	-.0708		-.2624		-.2352					
320.000			.2977	.1247	.0944	-.0143		-.1822		-.2371	-.2447	-.1319	.0093	.0757	.1376
340.000			.2675	.1041	.0975	.2370		-.2857		-.2329					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1449	.1577	.1745	-.0891	-.3175	-.2776	-.2492		-.2075	-.1987					
40.000	.1258	.1375	.1184	-.1474	-.3354	-.2761	-.2415		-.2036	-.1968					
70.000	-.2388	-.4322	-.1738	.0110	-.2686	-.4670	-.2189								
90.000	-.1793	-.3538	-.0764	.0266	-.3510	-.4392	-.3295								
105.000			.0130	.0407	-.4629	-.4689	-.4324								
110.000								-.2228							
120.000	-.1237	-.1501	.0817	.1367	-.5423	-.4890	-.4019	-.2110							
135.000			.1469	.3234	-.4723	-.4213	-.3413								
150.000	-.0697	-.0455	.1648	.3909	-.3651	-.3830	-.3028								
165.000	-.0575		.1674		-.1699	-.3463	-.2049								
180.000	-.0579	-.0149	.1720	.3718											
320.000	.1348	.1661	.1739	-.1045	-.2970	-.2606	-.2197								

ORIGINAL PAGE IS  
OF POOR QUALITY

ARC11-019 IAB1 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB17)

ALPHA0( 6) = 4.251 BETA0 ( 4) = 4.101

SECTION ( 1) ORBITER FUSELAGE		DEPENDENT VARIABLE CP													
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.1695	.6586	.1834	.0887	.0540	.7388		-.4455		-.2499	-.2079	-.1605	-.0494	.0441	.0994
20.000			.1556	.0504	.0125	.0842		-.3838		-.2480					
40.000			.1705	.0136	-.0374	-.1414		-.2542		-.2514	-.2718	-.1540	-.0304	.0540	.1094
55.000			.1709	-.0185	-.0885	-.1971		-.3628		-.2827					
70.000			.1701	-.0366	-.1307	-.1573		-.3609		-.3591	-.8370	-.1686	-.0372	.0077	
90.000		.2564	.1897	-.0228	-.1323	-.1217		-.3057		-.4320	-.8918	-.2328	-.0125	.0089	
120.000			.2155	.0481	-.0650	.0076		-.0683		-.6381	-.8822	-.3998	-.0037	.0039	
140.000										-.9040					
150.000			.2183	.1125	.0246	.1029				-1.0887	-.9242	-.4387	.0055	.0000	
151.000									.0163						
156.000								.3973							
162.000									.0869						
165.000										-1.0375	-.8914	-.3301	.0058	-.0054	
169.000								.5234							
174.000							.6856								
180.000	1.1695	.4272	.2296	.1485	.0897	.1701		.5272		-1.1745	-.9092	-.4315	.0169	-.0123	
305.000			.4898	.2813	.2019	.0326		-.1495		-.1610					
320.000			.3833	.1769	.1361	.0521		-.3469		-.1883	-.2357	-.0838	.0284	.0998	.1846
340.000			.2837	.1101	.0862	.2829		-.2926		-.2337					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1359	.1989	.3110	.0489	-.3006	-.2894	-.2926		-.2231	-.1931					
40.000	.1654	.2297	.3386	.0454	-.3002	-.2486	-.2534		-.2311	-.2334					
70.000	-.2254	-.3529	-.1877	-.0477	-.3631	-.5725	-.2158								
90.000	-.1755	-.2674	-.0998	-.0273	-.4428	-.5760	-.2531								
105.000			-.0349	.0085	-.5689	-.6240	-.2665								
110.000								-.2275							
120.000	-.1035	-.1213	.0288	.1287	-.6332	-.6679	-.3915	-.2213							
135.000			.1204	.3035	-.5452	-.5684	-.5589								
150.000	-.0666	-.0265	.1358	.4043	-.4511	-.5419	-.3934								
165.000	-.0693		.1474		-.2682	-.4954	-.2178								
180.000	-.0789	-.0104	.1643	.3230											
320.000	.1139	.1470	.1397	-.4581	-.3197	-.2869	-.2610								

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ARC11-019 IAB1 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB17)

ALPHA( 6) = 4.247 BETA( 5) = 6.153

SECTION ( 1) ORBITER FUSELAGE

DEPENDENT VARIABLE CP

X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.1334	.6426	.1716	.0702	.0255	.6342		-.4260		-.3079	-.2462	-.2191	-.0943	-.0005	.0600
20.000			.1165	.0087	-.0269	.0209		-.4316		-.2965					
40.000			.0974	-.0379	-.0873	-.2004		-.3459		-.2733	-.2923	-.1692	-.0594	.0365	.1028
55.000			.0845	-.0902	-.1490	-.2386		-.4392		-.2980					
70.000			.0865	-.1100	-.1849	-.2004		-.4366		-.3741	-.8541	-.2614	-.0442	.0079	
90.000		.1400	.1130	-.0917	-.1941	-.1578		-.3550		-.4498	-.6261	-.4224	-.0043	.0151	
120.000			.1466	-.0093	-.1247	-.0339		-.1288		-.7340	-.7814	-.4771	-.0054	.0110	
140.000										-1.0132					
150.000			.1638	.0736	-.0181	.0729				-1.1202	-1.0797	-.3277	-.0043	-.0081	
151.000									-.0565						
156.000								.3354							
162.000									.0314						
165.000										-1.0412	-1.1004	-.3536	.0090	-.0184	
169.000								.4868							
174.000							.6268								
180.000	1.1334	.3757	.2056	.1258	.0692	.1503		.4815		-1.1738	-.9225	-.4976	-.0134	-.0353	
305.000			.5781	.3619	.2681	.0938		-.0787		-.1059					
320.000			.4294	.2134	.1557	.0802		-.2337		-.1584	-.2679	-.0632	.0304	.1951	.1957
340.000			.2927	.1120	.0831	.2931		-.2721		-.2332					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1013	.1808	.3112	.0314	-.3059	-.2963	-.2881		-.2260	-.1967					
40.000	.1797	.2452	.3567	.1057	-.3113	-.2374	-.2548		-.2395	-.2299					
70.000	-.2070	-.2983	-.1867	-.0694	-.3857	-.5863	-.2261								
90.000	-.1496	-.2304	-.1098	-.0376	-.4628	-.5947	-.2655								
105.000			-.0417	.0184	-.5838	-.6414	-.2866								
110.000								-.2070							
120.000	-.0875	-.0987	.0214	.1078	-.6823	-.7082	-.5547	-.2070							
135.000			.0969	.3566	-.5832	-.6312	-.5985								
150.000	-.0664	-.0192	.1268	.3169	-.4838	-.6113	-.4085								
165.000	-.0802		.1556		-.3143	-.5401	-.2327								
180.000	-.0993	.0015	.1858	.1879											
320.000	.1072	.1556	.1513	-.4449	-.3193	-.2996	-.2734								



ARC11-019 1A81 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB17)

ALPHA( 7) = 6.350 BETA( 1) = -4.053

SECTION ( 1) ORBITER FUSELAGE		DEPENDENT VARIABLE CP													
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.1758	.7145	.2360	.1232	.1006	.7730		-.180		-.2016	-.1725	-.0914	-.0142	.1002	.1667
20.000			.3043	.1605	.1074	.3086		-.2687		-.2057					
40.000			.4723	.2264	.1432	.0727		-.3761		-.1940	-.1997	-.0609	.0209	.1259	.2018
55.000			.5289	.2992	.1820	.0357		-.1507		-.1612					
70.000			.5111	.2744	.1417	.0495		-.0974		-.1789	-.6030	-.1876	-.0653	.0224	
90.000		.6643	.4792	.2569	.1169	.0795		-.0494		-.1721	-.6915	-.2558	-.0827	.0054	
120.000			.3939	.2116	.0911	.1414		.1703		-.3002	-.6870	-.5473	-.2189	-.1245	
140.000										-.4053					
150.000			.2748	.1262	.0723	.1540				-.5566	-.7061	-.5057	-.1664	-.0350	
151.000									.2441						
156.000								.5771							
162.000									.2611						
165.000										-1.0210	-.7011	-.5715	-.1547	-.0232	
169.000								.5979							
174.000							.7630								
180.000	1.1758	.4243	.1678	.1055	.0638	.1471		.4810		-.7072	-.7316	-.6135	-.1441	-.0095	
305.000			.1573	.0161	-.0232	-.1785		-.4063		-.2692					
320.000			.2112	.0595	.0442	-.1101		-.2446		-.2516	-.2350	-.1496	-.0191	.0618	.1309
340.000			.2508	.0876	.0888	.1548		-.2824		-.2463					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1988	.2785	.4624	.0657	-.3328	-.2838	-.2747		-.2231	-.2106					
40.000	.1480	.1562	.2021	-.3491	-.3948	-.2861	-.2388		-.2102	-.2010					
70.000	-.2624	-.5265	-.1748	.0570	-.1714	-.4214	-.1834								
90.000	-.2236	-.4431	-.0811	.0646	-.2087	-.3803	-.3357								
105.000			.0441	.0672	-.2932	-.4020	-.4708								
110.000								-.2340							
120.000	-.2675	-.2536	.1423	.0523	-.3967	-.3834	-.3822	-.2012							
135.000			.1585	.1494	-.4332	-.3128	-.2984								
150.000	-.1318	-.0815	.1391	.1771	-.3397	-.2544	-.2573								
165.000	-.1112		.1148		-.0781	-.2063	-.2214								
180.000	-.0964	-.0541	.1071	.2875											
320.000	.1970	.2824	.3832	.0371	-.2762	-.2705	-.1993								

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ARC11-019 IAB1 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB17)

ALPHA0( 7) = 6.348 BETA0( 2) = -2.025

SECTION ( 1) ORBITER FUSELAGE		DEPENDENT VARIABLE CP													
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.1886	.7222	.2438	.1241	.0986	.7365		-.4124		-.1926	-.1495	-.0772	.0046	.0981	.1497
20.000			.2874	.1473	.0982	.2730		-.2814		-.1934					
40.000			.4120	.1905	.1122	.0338		-.4010		-.1918	-.2143	-.0772	.0166	.1117	.1839
55.000			.4475	.2246	.1209	-.0222		-.2365		-.1911					
70.000			.4282	.1984	.0732	-.0015		-.1645		-.2201	-.6771	-.1939	-.0702	.0132	
90.000		.5728	.4089	.1893	.0558	.0299		-.1015		-.2314	-.7330	-.2652	-.0770	.0034	
120.000			.3559	.1757	.0568	.1149		.1256		-.3746	-.7212	-.4802	-.1736	-.0713	
140.000										-.4889					
150.000			.2685	.1275	.0702	.1536			.2015	-.8773	-.6873	-.5327	-.1680	-.0099	
151.000															
156.000								.5462							
162.000									.2305						
165.000										-1.0300	-.7102	-.5916	-.1559	.0003	
169.000								.5907							
174.000						.7625									
180.000	1.1886	.4199	.1885	.1232	.0725	.1582		.5228		-.6976	-.7106	-.6109	-.1430	.0148	
305.000			.2476	.0899	.0342	-.1256		-.3271		-.2394					
320.000			.2705	.1035	.0821	-.0570		-.2028		-.2257	-.2183	-.1220	.0011	.0771	.1353
340.000			.2758	.1077	.1001	.1953		-.2898		-.2150					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1683	.2235	.3441	-.0451	-.3307	-.2769	-.2708		-.2178	-.2075					
40.000	.1421	.1395	.1132	-.3608	-.3535	-.2712	-.2418		-.2163	-.2026					
70.000	-.2555	-.5054	-.1953	.0286	-.2118	-.4408	-.2479								
90.000	-.2101	-.4166	-.0979	.0302	-.2718	-.4101	-.4475								
105.000			.0291	.0370	-.3562	-.4332	-.5374								
110.000								-.2207							
120.000	-.2025	-.2166	.0999	.0143	-.4666	-.4223	-.4284	-.1956							
135.000			.1282	.2088	-.4697	-.3378	-.3656								
150.000	-.1060	-.0862	.1176	.2749	-.3699	-.3043	-.2933								
165.000	-.0874		.1153		-.1361	-.2727	-.2203								
180.000	-.0787	-.0493	.1141	.3224											
320.000	.1692	.2512	.3402	.0151	-.2784	-.2441	-.2062								

## ARC11-019 IAB1 LVAP(ELHL SEALED) ORB. FUSELAGE

(RET817)

ALPHA0 ( 7 ) = 6.344 BETA0 ( 3 ) = .018

SECTION ( 1 ) ORBITER FUSELAGE				DEPENDENT VARIABLE CP											
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.1925	.7241	.2436	.1326	.0993	.6265		-.4019		-.1929	-.1396	-.0760	.0091	.0931	.1439
20.000			.2638	.1329	.0833	.2228		-.3462		-.1902					
40.000			.3449	.1478	.0719	-.0155		-.2173		-.1993	-.2226	-.0982	.0133	.0980	.1656
55.000			.3565	.1528	.0514	-.0801		-.2464		-.2106					
70.000			.3418	.1238	.0038	-.0559		-.2010		-.2582	-.7278	-.1956	-.0754	.0057	
90.000		.4658	.3329	.1219	-.0099	-.0224		-.1409		-.2926	-.7794	-.2168	-.0822	.0007	
120.000			.3045	.1341	.0184	.0852		.0803		-.4555	-.7419	-.3578	-.1352	-.0314	
140.000										-.5878					
150.000			.2459	.1215	.0561	.1367				-.9577	-.7144	-.5275	-.1378	.0004	
151.000									.1489						
156.000								.5052							
162.000									.1867						
165.000										-1.0238	-.7362	-.5848	-.1325	.0176	
169.000								.5752							
174.000							.7345								
180.000	1.1925	.4168	.1974	.1313	.0222	.1683		.5408		-.6857	-.7381	-.5870	-.1583	.0199	
305.000			.3406	.1651	.0988	-.0701		-.2320		-.2103					
320.000			.3283	.1484	.0434	-.0017		-.1419		-.2118	-.2090	-.0910	.0185	.0893	.1530
340.000			.2997	.1240	.1196	.2386		-.2741		-.2069					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1622	.1700	.1860	-.0838	-.3028	-.2754	-.2403		-.2018	-.1968					
40.000	.1439	.1547	.1395	-.1303	-.3374	-.2716	-.2369		-.2041	-.1946					
70.000	-.2589	-.4884	-.2112	.0038	-.2475	-.4661	-.2349								
90.000	-.2042	-.3970	-.1133	-.0004	-.3237	-.4406	-.3930								
105.000			-.0141	.0053	-.4216	-.4676	-.5029								
110.000								-.2259							
120.000	-.1550	-.1819	.0404	.0660	-.5148	-.4732	-.4410	-.2004							
135.000			.0990	.2599	-.4760	-.3884	-.3758								
150.000	-.0922	-.0706	.1123	.3110	-.3763	-.3590	-.3114								
165.000	-.0785		.1199		-.1651	-.3186	-.2160								
180.000	-.0720	-.0374	.1252	.3346											
320.000	.1471	.1780	.1801	-.0841	-.2789	-.2601	-.2217								

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ARC11-019 IAB1 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB17)

ALPHA0 ( 7 ) = 6.340 BETA0 ( 4 ) = 2.076

SECTION ( 1 ) ORBITER FUSELAGE		DEPENDENT VARIABLE CP													
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.1826	.7123	.2318	.1164	.0823	.7717		-.4974		-.1836	-.1489	-.1010	-.0125	.0762	.1258
20.000			.2267	.1027	.0587	.1631		-.3527		-.2036					
40.000			.2711	.0943	.0290	-.0612		-.2054		-.2086	-.2350	-.1155	-.0053	.0811	.1380
55.000			.2711	.0668	-.0183	-.1471		-.2910		-.2301					
70.000			.2536	.0428	-.0633	-.1678		-.2645		-.2865	-.7639	-.1621	-.0702	-.0008	
90.000		.3552	.2598	.0485	-.0690	-.0750		-.2065		-.3429	-.8182	-.2026	-.0778	.0023	
120.000			.2516	.0782	-.0246	.0151		.0189		-.5320	-.7513	-.3312	-.1190	-.0042	
140.000										-.6855					
150.000			.2170	.0954	.0336	.0413				-1.0197	-.7111	-.5357	-.1323	.0119	
151.000									.0877						
156.000								.4511							
162.000									.1388						
165.000										-.9791	-.7341	-.5885	-.0595	.0126	
169.000								.5504							
174.000							.7072								
180.000	1.1826	.3964	.1952	.1266	.0695	.1456		.5348		-.6974	-.7528	-.5930	-.1395	.0069	
305.000			.4306	.2349	.1574	-.0234		-.1997		-.1719					
320.000			.3710	.1796	.1423	.0363		-.3406		-.1922	-.2046	-.0793	.0349	.0964	.1789
340.000			.3073	.1308	.1115	.2677		-.2638		-.2048					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1564	.1932	.2632	.0142	-.2947	-.3027	-.2902		-.2298	-.2000					
40.000	.1587	.2078	.2949	-.0167	-.2939	-.2631	-.2455		-.2267	-.2191					
70.000	-.2634	-.4506	-.2282	-.0331	-.3031	-.4993	-.2573								
90.000	-.2009	-.3593	-.1370	-.0270	-.3797	-.4707	-.4364								
105.000			-.0449	-.0052	-.4980	-.4947	-.4559								
110.000								-.2242							
120.000	-.1222	-.1629	-.0041	.0688	-.5668	-.5279	-.4619	-.2135							
135.000			.0764	.2713	-.4746	-.4578	-.3847								
150.000	-.0813	-.0652	.1077	.3243	-.3854	-.4284	-.3255								
165.000	-.0741		.1092		-.2071	-.3832	-.2139								
180.000	-.0810	-.0427	.1153	.3190											
320.000	.1348	.1456	.1222	-.3347	-.3123	-.3006	-.2674								

ARC11-019 IAB1 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB17)

ALPHA0( 7) = 6.335 BETA0 ( 5) = 4.123

SECTION ( 1) ORBITER FUSELAGE

DEPENDENT VARIABLE CP

X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.1611	.6869	.2152	.0994	.0644	.7350		-.4323		-.2183	-.1828	-.1432	-.0392	.0525	.1107
20.000			.1814	.0620	.0224	.0923		-.3704		-.2183					
40.000			.1915	.0330	-.0231	-.1297		-.2264		-.2240	-.2420	-.1417	-.0248	.0654	.1244
55.000			.1810	-.0109	-.0857	-.1936		-.3387		-.2565					
70.000			.1720	-.0326	-.1293	-.1530		-.3175		-.3209	-.7956	-.1654	-.0786	-.0021	
90.000	.2444		.1848	-.0231	-.1369	-.1152		-.2729		-.3917	-.8602	-.1975	-.0661	.0047	
120.000			.1938	.0284	-.0735	.0038		-.0437		-.6059	-.7305	-.3403	-.1068	.0039	
140.000										-.8577					
150.000			.1833	.0784	.0054	.0859			.0239	-1.0694	-.6636	-.5391	-.1147	.0172	
151.000															
156.000								.3967							
162.000									.0872						
165.000										-.9265	-.7217	-.5557	-.1284	.0081	
169.000								.5200							
174.000							.6589								
180.000	1.1611	.3779	.1903	.1194	.0604	.1487		.5196		-.7614	-.7424	-.5482	-.1333	-.0079	
305.000			.5144	.3077	.2201	.0362		-.1311		-.1381					
320.000			.4153	.2050	.1601	.0574		-.2705		-.1706	-.2021	-.0646	.0456	.1114	.1969
340.000			.3081	.1289	.0989	.2924		-.2626		-.2141					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1454	.2082	.3223	.0518	-.2985	-.3004	-.2998		-.2185	-.1930					
40.000	.1782	.2303	.3341	.0392	-.3012	-.2504	-.2498		-.2273	-.2250					
70.000	-.2501	-.4112	-.2307	-.0680	-.3530	-.5467	-.2307								
90.000	-.1909	-.3237	-.1415	-.0527	-.4341	-.5307	-.2907								
105.000			-.0752	-.0310	-.5525	-.5768	-.3182								
110.000								-.2252							
120.000	-.1084	-.1491	-.0279	.0815	-.5982	-.6210	-.4095	-.2218							
135.000			.0686	.2815	-.4868	-.5362	-.3709								
150.000	-.0717	-.0474	.0995	.3104	-.4125	-.5110	-.3235								
165.000	-.0771		.1052		-.2665	-.4633	-.2157								
180.000	-.0889	-.0374	.1136	.2879											
320.000	.1291	.1623	.1586	-.4539	-.3206	-.2960	-.2585								

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## 1A81A - PRESSURE SOURCE DATA TABULATION

PAGE 351

ARC11-019 1A81 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB18) ( 02 OCT 74 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 976.0000 IN. XT  
 LREF = 1297.0000 INCHES YMRP = .0000 IN. YT  
 BREF = 1297.0000 INCHES ZMRP = 400.0000 IN. ZT  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

MACH = 1.100 RN/FT = 2.250  
 ELV-18 = 10.000 ELV-OB = 4.000  
 RUDDER = .000 SPDBRK = .000

ALPHA( 1 ) = -6.223 BETA( 1 ) = .032

## SECTION ( 1 ) ORBITER FUSELAGE

## DEPENDENT VARIABLE CP

X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.3260	.7399	.3810	.3356	.3354	.8074		-.4199		-.0764	-.1878	-.1572	-.1816	-.0625	.0472
20.000			.3920	.3289	.3185	.4750		-.4016		-.0436					
40.000			.4773	.3228	.2868	.2851		-.4397		-.4304	-.1190	-.2005	-.3247	-.0618	.0908
55.000			.5368	.3505	.2808	.2094		-.0962		-.2860					
70.000			.5715	.3637	.2720	.2263		.0095		-.1880	-.5967	-.3363	-.2449	-.1114	
90.000		.7478	.6111	.3974	.2811	.2464		.0627		-.1736	-.5354	-.5447	-.2141	-.1144	
120.000			.6661	.4990	.3816	.3997		.3036		-.1919	-.4402	-.6831	-.2682	-.1332	
140.000										-.3087					
150.000			.6836	.5615	.4116	.5111				-.4520	-.5425	-.3402	-.2793	-.1433	
151.000									.4478						
156.000								.7498							
162.000									.5156						
165.000										-.4747	-.4907	-.2557	-.2803	-.1410	
169.000								.8481							
174.000						.9799									
180.000	1.3260	.8817	.6685	.5780	.5197	.5554		.8364		-.4788	-.5675	-.2372	-.2773	-.1423	
305.000			.5151	.3641	.3158	.2110		-.1851		-.3023					
320.000			.4454	.3246	.3216	.2832		-.4979		-.0618	-.3570	-.1521	-.2079	-.0720	.0587
340.000			.4291	.3253	.3410	.4917		-.4474		-.0336					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1107	.1860	.2726	.0719	-.3705	-.3352	-.3265		-.2886	-.3035					
40.000	.0803	.1265	.1577	-.1496	-.3837	-.3433	-.3241		-.2805	-.2775					
70.000	.0526	.0921	.2230	.2728	.0273	-.1671	-.3867								
90.000	.0715	.1471	.2757	.2934	-.0453	-.1441	-.2415								
105.000			.3314	.2265	-.1297	-.1728	-.2513								
110.000								-.4176							
120.000	.0769	.2169	.3703	.1726	-.1948	-.2205	-.2674	-.3371							
135.000			.4689	.4789	-.0928	-.1091	-.1520								
150.000	.0678	.2726	.4912	.5376	.0290	-.0400	-.1341								
165.000	.0627		.4919		.2278	.0185	-.3083								
180.000	.0634	.2868	.4929	.6734											
320.000	.0708	.1675	.2569	-.0503	-.3105	-.3221	-.3154								

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## IA81A - PRESSURE SOURCE DATA TABULATION

PAGE 353

ARC11-019 IA81 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB18)

ALPHA0( 2) = -4.111 BETA0( 2) = .021

SECTION ( 1) ORBITER FUSELAGE				DEPENDENT VARIABLE CP											
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.3103	.7454	.3662	.3112	.3065	.7822		-.4760		-.0903	-.1848	-.1397	-.1597	-.0561	.0593
20.000			.3789	.3034	.2923	.4464		-.4219		-.0574					
40.000			.4642	.3014	.2599	.2249		-.4454		-.3435	-.1161	-.1672	-.3060	-.0564	.1042
55.000			.5233	.3291	.2525	.1716		-.1023		-.2846					
70.000			.5508	.3399	.2424	.1863		.0005		-.1894	-.5922	-.3343	-.2661	-.1212	
90.000		.7217	.5866	.3716	.2505	.2095		.0592		-.1720	-.5434	-.5342	-.2292	-.1265	
120.000			.6285	.4634	.3218	.3555		.2960		-.1929	-.4477	-.6912	-.2560	-.1289	
140.000										-.3035					
150.000			.6354	.5126	.4179	.4590				-.4768	-.5739	-.3970	-.3094	-.1329	
151.000									.4297						
156.000								.7322							
162.000									.4944						
165.000										-.4910	-.5201	-.3000	-.3134	-.1336	
169.000								.6260							
174.000							.9556								
180.000	1.3103	.8286	.6127	.5282	.4481	.5015		.8116		-.5241	-.5932	-.2795	-.3124	-.1329	
305.000			.5020	.3426	.2217	.1719		-.1901		-.2922					
320.000			.4387	.3007	.2470	.2474		-.5077		-.0740	-.3516	-.1292	-.1966	-.0542	.0732
340.000			.4182	.2980	.2877	.4636		-.4621		-.0423					
X/LB															
	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1255	.1955	.2674	.0709	-.3634	-.3249	-.3109			-.2730	-.2861				
40.000	.1002	.1488	.1719	-.1125	-.3816	-.3351	-.3089			-.2608	-.2564				
70.000	.0225	-.0501	.1813	.2414	.0135	-.1751	-.3866								
90.000	.0421	.0151	.2465	.2391	-.0496	-.1528	-.2480								
105.000			.3073	.2181	-.1299	-.1859	-.2592								
110.000										-.4072					
120.000	.0529	.1570	.3431	.1077	-.1818	-.2234	-.2693			-.3244					
135.000			.4282	.4208	-.1036	-.1230	-.1659								
150.000	.0573	.2350	.4521	.4691	.0078	-.0631	-.1510								
165.000	.0586		.4511		.2143	-.0080	-.2987								
180.000	.0607	.2465	.4521	.6074											
320.000	.0951	.1837	.2644	-.0263	-.2983	-.3204	-.3001								



ARC11-019 IA81 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB18)

ALPHA0 ( 2 ) = -4.085 BETA0 ( 3 ) = 4.129

SECTION ( 1 ) ORBITER FUSELAGE		DEPENDENT VARIABLE CP													
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.2961	.7278	.3403	.2859	.2785	.8966		-.4647		-.1348	-.2552	-.1799	-.1814	-.0971	.0430
20.000			.3204	.2582	.2461	.3739		-.4872		-.1151					
40.000			.3530	.2322	.2072	.1746		-.5394		-.1887	-.2037	-.2437	-.2445	-.0505	.0792
55.000			.3829	.2194	.1654	.1260		-.1920		-.3841					
70.000			.4063	.2164	.1370	.1346		-.0819		-.2831	-.6799	-.4436	-.3106	-.1025	
90.000		.5232	.4466	.2400	.1343	.1441		-.0224		-.2757	-.6405	-.6409	-.2750	-.1116	
120.000			.5109	.3500	.2231	.2686		.1831		-.3260	-.5456	-.7671	-.4301	-.1421	
140.000										-.5104					
150.000		.5569	.4550	.3595	.3390					-.5551	-.5951	-.3442	-.3821	-.1850	
151.000									.3210						
156.000								.6486							
162.000									.4103						
165.000										-.4907	-.6175	-.3052	-.3355	-.1894	
169.000								.7784							
174.000						.9133									
180.000	1.2961	.7914	.5992	.5107	.4467	.4241		.7935		-.6182	-.5073	-.3113	-.2955	-.2080	
305.000			.6305	.4371	.3592	.2542		-.0689		-.1681					
320.000			.4952	.3227	.2997	.3021		-.4012		-.1932	-.3219	-.0377	-.3831	.0505	.1390
340.000			.4226	.2913	.2915	.5222		-.5156		-.0640					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1306	.2326	.3536	.1674	-.3125	-.3172	-.3039		-.2646	-.2619					
40.000	.1339	.2579	.4279	.2144	-.4715	-.2791	-.3001		-.2659	-.2639					
70.000	.0532	.0447	.1607	.2424	-.0253	-.2076	-.4228								
90.000	.0785	.1032	.2147	.2461	-.0699	-.2177	-.3177								
105.000			.2688	.1840	-.1964	-.2383	-.3160								
110.000								-.3843							
120.000	.0866	.1701	.2792	.0020	-.3044	-.3478	-.3894	-.3214							
135.000			.3661	.3850	-.1910	-.2437	-.2734								
150.000	.0866	.2164	.3982	.4974	-.0716	-.1923	-.2697								
165.000	.0782		.4113		.1299	-.1109	-.3012								
180.000	.0708	.2205	.4309	.5315											
320.000	.0998	.1813	.1928	-.3000	-.3334	-.3461	-.3546								

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## IA81A - PRESSURE SOURCE DATA TABULATION

PAGE 355

ARC11-019 IA81 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB18)

ALPHA( 3) = .045 BETA( 1) = -6.157

SECTION ( 1) ORBITER FUSELAGE		DEPENDENT VARIABLE CP													
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.2698	.7573	.3342	.2528	.2623	.8822		-.5541		-.1701	-.1752	-.2008	-.2718	.0476	.1629
20.000			.4068	.2844	.2633	.4880		-.4233		-.2171					
40.000			.6042	.3521	.2852	.2512		-.3057		-.1458	-.0005	-.0681	-.1668	-.0339	.2229
55.000			.7108	.4685	.3575	.2027		.0284		-.0875					
70.000			.7324	.4850	.3494	.2237		.1194		-.0103	-.3693	-.1491	-.1568	-.0876	
90.000		.9308	.7317	.4998	.3561	.2618		.1903		.0297	-.3906	-.2871	-.1996	-.0963	
120.000			.6810	.4924	.2326	.3543		.4282		.0002	-.3119	-.5385	-.2590	-.2052	
140.000										-.0478					
150.000			.5679	.4123	.2930	.3684				-.2316	-.6664	-.5144	-.2717	-.2533	
151.000									.5314						
156.000								.8070							
162.000									.5550						
165.000										-.5397	-.6188	-.4710	-.3034	-.2762	
169.000								.8226							
174.000							.9365								
180.000	1.2698	.7106	.4463	.3696	.2563	.3393		.6894		-.6518	-.5529	-.4342	-.3478	-.2519	
305.000			.2527	.1534	-.0190	-.0326		-.3557		-.4562					
320.000			.2898	.1850	.1183	.0151		-.7121		-.1877	-.2758	-.2029	-.1645	-.0662	.0831
340.000			.3430	.2176	.1808	.3036		-.5150		-.0677					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.2223	.3756	.5863	.2512	-.3776	-.3183	-.3232		-.2562	-.2541					
40.000	.1380	.1974	.2871	-.1207	-.4577	-.3865	-.3576		-.2386	-.2403					
70.000	-.0565	-.1980	-.2506	.2257	.0533	-.1331	-.3859								
90.000	-.0336	-.1441	-.0231	.2321	.0196	-.1210	-.2524								
105.000			.1774	.2526	-.0624	-.1630	-.2480								
110.000								-.3686							
120.000	-.0801	-.0964	.3497	.2490	-.1065	-.1562	-.1660	-.2907							
135.000			.4002	.3459	-.1089	-.0533	-.1029								
150.000	.0465	.0405	.3935	.3382	-.0131	.0448	-.0827								
165.000	.0627		.3585		.3107	.1322	-.2789								
180.000	.0708	.1317	.3255	.3836											
320.000	.2574	.4433	.5794	.3574	-.3085	-.2905	-.2819								

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ARC11-019 IAB1 LVAP(ELHL SEALED) ORB. FUSELAGE

(RET818)

ALPHA0 ( 3 ) = .049 BETA0 ( 2 ) = -4.107

SECTION ( 1 ) ORBITER FUSELAGE		DEPENDENT VARIABLE CP													
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.2966	.7635	.3216	.2425	.2567	.8946		-.4401		-.0595	-.1527	-.1412	-.1238	-.0080	.1431
20.000			.3770	.2664	.2480	.5213		-.4598		-.0813					
40.000			.5507	.3110	.2493	.2887		-.3615		-.3758	-.0382	-.0931	-.1769	-.0550	.1952
55.000			.6408	.4012	.2929	.2345		-.0259		-.1654					
70.000			.6631	.4157	.2827	.2489		.0701		-.0843	-.4896	-.1876	-.1709	-.0990	
90.000		.8536	.6724	.4347	.2918	.2782		.1399		-.0504	-.4473	-.3117	-.2176	-.1064	
120.000			.6456	.4573	.3334	.3910		.3833		-.0683	-.3630	-.6107	-.2501	-.1873	
140.000										-.1208					
150.000			.5682	.4161	.3515	.4197				-.4167	-.6688	-.4844	-.2612	-.1985	
151.000									.4950						
156.000								.7820							
162.000									.5305						
165.000										-.5346	-.5902	-.4679	-.3038	-.1778	
169.000								.8192							
174.000							.9543								
180.000	1.2966	.7249	.4716	.3918	.3423	.4118		.7283		-.6454	-.5949	-.3940	-.3545	-.1484	
305.000			.3209	.1919	.1663	.0816		-.3175		-.3899					
320.000			.3205	.1987	.2148	.1542		-.6666		-.1432	-.2434	-.1593	-.1379	-.0361	.0849
340.000			.3448	.2129	.2499	.3975		-.5488		-.0599					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.2293	.3687	.5608	.2340	-.3815	-.3148	-.3137		-.2534	-.2598					
40.000	.1505	.2038	.2935	-.1482	-.4227	-.3668	-.3394		-.2379	-.2402					
70.000	-.0280	-.1944	-.1912	.2073	.0229	-.1555	-.3939								
90.000	.0054	-.1430	.0395	.2117	-.0183	-.1447	-.2633								
105.000			.1973	.2211	-.1065	-.1906	-.2650								
110.000								-.3501							
120.000	-.0193	-.0476	.3416	.2195	-.1460	-.1987	-.2108	-.3096							
135.000			.4005	.3600	-.1261	-.1012	-.1425								
150.000	.0419	.1015	.3941	.3647	-.0296	-.0207	-.1192								
165.000	.0628		.3765		.2496	.0574	-.2869								
180.000	.0817	.1658	.3467	.4137											
320.000	.2362	.4127	.5370	.2995	-.3003	-.2684	-.2697								

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## IAB1A - PRESSURE SOURCE DATA TABULATION

PAGE 357

ARC11-019 IAB1 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB18)

ALPHA( 3) = .052 BETA( 3) = -.012

SECTION ( 1) ORBITER FUSELAGE	DEPENDENT VARIABLE CP														
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.3231	.7494	.2786	.2192	.2178	.7162		-.3886		-.0483	-.1053	-.1161	-.1076	-.0166	.0998
20.000			.3041	.2148	.1986	.4403		-.5420		-.0386					
40.000			.4252	.2303	.1725	.2323		-.4399		-.1577	-.1060	-.1331	-.1691	-.0391	.1472
55.000			.4920	.2733	.1732	.1462		-.1028		-.2647					
70.000			.5116	.2817	.1587	.1548		-.0072		-.1774	-.5858	-.2937	-.2430	-.1348	
90.000		.6727	.5350	.3104	.1868	.1845		.0571		-.1550	-.5516	-.4049	-.2470	-.1335	
120.000			.5515	.3780	.2487	.3160		.2935		-.2002	-.4635	-.7059	-.2302	-.1288	
140.000										-.3042					
150.000			.5305	.4003	.3252	.3932				-.5241	-.6654	-.4835	-.3276	-.1045	
151.000									.4086						
156.000								.7112							
162.000									.4631						
165.000										-.5397	-.5844	-.3800	-.3622	-.1001	
169.000								.7949							
174.000						.9225									
180.000	1.3231	.7147	.4951	.4108	.3549	.4283		.7745		-.6597	-.6441	-.3572	-.3643	-.0964	
305.000			.4631	.2831	.2135	.1476		-.1925		-.2303					
320.000			.3838	.2243	.2111	.2169		-.4978		-.0683	-.2540	-.0841	-.0935	-.0240	.1150
340.000			.3469	.2128	.2220	.4410		-.4871		-.0067					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1742	.2381	.2947	.0826	-.3597	-.3097	-.2907		-.2482	-.2492					
40.000	.1546	.2080	.2236	-.0236	-.4154	-.3364	-.3016		-.2428	-.2482					
70.000	-.0297	-.1836	.0008	.1800	-.0169	-.1908	-.4000								
90.000	.0058	-.1204	.1178	.1702	-.0672	-.1689	-.2776								
105.000			.1932	.1509	-.1611	-.2148	-.2884								
110.000								-.3764							
120.000	.0332	.0481	.2679	.1917	-.1821	-.2545	-.2880	-.3185							
135.000			.3099	.3886	-.0696	-.1608	-.2106								
150.000	.0623	.1651	.3234	.4173	-.0098	-.1053	-.1940								
165.000	.0684		.3447		.1742	-.0454	-.2833								
180.000	.0700	.1651		.4919											
320.000	.1644	.2544	.3143	.0553	-.2942	-.3280	-.2789								



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## IAB1A - PRESSURE SOURCE DATA TABULATION

PAGE 359

ARC11-019 IAB1 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB18)

ALPHA0( 3) = .076 BETA0 ( 5) = 6.162

SECTION ( 1) ORBITER FUSELAGE	DEPENDENT VARIABLE CP														
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.2548	.7216	.2841	.2062	.1947	.8261		-.5005		-.1605	-.2839	-.1702	-.1354	-.1572	.0452
20.000			.2386	.1613	.1575	.2918		-.5292		-.2152					
40.000			.2455	.1298	.1092	.0775		-.6273		-.2001	-.1828	-.2490	-.2402	-.0255	.1071
55.000			.2634	.1065	.0561	.0229		-.2713		-.4432					
70.000			.2844	.0984	.0200	-.0153		-.1474		-.3361	-.7220	-.4712	-.3336	-.0181	
90.000		.3509	.3230	.1204	.0098	.0059		-.0789		-.3243	-.6945	-.6464	-.2943	-.0346	
120.000			.3709	.2187	.0908	.1764		.1149		-.3922	-.6236	-.8200	-.3554	-.0843	
140.000										-.5910					
150.000			.4043	.3133	.2211	.2887				-.6358	-.6860	-.4307	-.4468	-.1468	
151.000									.2244						
156.000								.5633							
162.000									.3205						
165.000										-.5656	-.6877	-.4035	-.3860	-.2067	
169.000								.7080							
174.000						.7715									
180.000	1.2548	.6344	.4577	.3705	.3088	.3839		.7177		-.6714	-.5574	-.4559	-.3376	-.2655	
305.000			.6847	.4638	.3788	.2665		-.0298		-.0203					
320.000			.5192	.3005	.2774	.2887		-.3495		-.0467	-.2917	.0471	-.3510	.1078	.1822
340.000			.4009	.2272	.2331	.4876		-.5682		.0527					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1433	.2532	.3755	.1291	-.2760	-.3105	-.3020		-.2484	-.2433					
40.000	.2214	.3702	.5271	.3629	-.4396	-.2638	-.2990		-.2582	-.2511					
70.000	.0114	-.1062	.0577	.1917	-.0701	-.2405	-.4531								
90.000	.0530	-.0285	.1146	.1975	-.1292	-.2506	-.3518								
105.000			.1917	.1965	-.2168	-.2784	-.3572								
110.000								-.3555							
120.000	.0676	.0932	.2245	.0348	-.3034	-.3911	-.4379	-.3227							
135.000			.2557	.2850	-.2334	-.3213	-.3515								
150.000	.0747	.1454	.2736	.4003	-.1617	-.3081	-.3559								
165.000	.0682		.2973		.0446	-.2203	-.3156								
180.000	.0574	.1217	.3315	.3908											
320.000	.1514	.2323	.2242	-.2909	-.2946	-.3583	-.3796								

ARC11-019 1A81 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB18)

ALPHA( 4) = 4.250 BETA( 1) = -4.085

SECTION ( 1) ORBITER FUSELAGE		DEPENDENT VARIABLE CP													
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.3062	.7637	.2389	.1826	.2150	.8717		-.5683		-.0764	-.1093	-.1039	-.0248	.0339	.1677
20.000			.3274	.2154	.2123	.5144		-.5925		-.0473					
40.000			.5382	.2917	.2380	.2660		-.3507		-.4149	-.0084	-.0554	-.0107	-.0084	.2292
55.000			.6277	.3913	.2883	.1392		-.0396		-.1667					
70.000			.6339	.3906	.2586	.1998		.0544		-.0804	-.4796	-.1378	-.1372	-.1560	
90.000		.8136	.6239	.3909	.2407	.2284		.1263		-.0390	-.4484	-.2322	-.2056	-.1523	
120.000			.5654	.3734	.2108	.3028		.3728		-.0805	-.3976	-.6166	-.3620	-.2835	
140.000										-.1445					
150.000			.4614	.3069	.2319	.3232				-.4464	-.7285	-.5690	-.2915	-.1728	
151.000									.4721						
156.000								.7624							
162.000									.4978						
165.000										-.5917	-.6709	-.5398	-.3237	-.1380	
169.000								.7901							
174.000							.9165								
180.000	1.3062	.6239	.3608	.2832	.2215	.3159		.6935		-.7014	-.6645	-.4626	-.3825	-.1147	
305.000			.2727	.1536	.1285	-.0166		-.3289		-.3112					
320.000			.2596	.1485	.1729	.0968		-.6627		-.1374	-.1367	-.1037	-.0839	-.0025	.1103
340.000			.2765	.1522	.2033	.3332		-.5386		-.1063					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.2447	.3687	.5601	.2326	-.3479	-.2787	-.2820		-.2451	-.2403					
40.000	.1667	.2170	.3050	-.1587	-.3779	-.3502	-.3047		-.2245	-.2214					
70.000	-.0769	-.2785	-.3452	.1188	-.0361	-.1950	-.4304								
90.000	-.0461	-.2201	-.1289	.1029	-.0739	-.1960	-.3155								
105.000			.1049	.1235	-.1518	-.2554	-.3287								
110.000								-.3067							
120.000	-.1032	-.1225	.2580	.1249	-.1802	-.2817	-.2857	-.3155							
135.000			.2938	.2544	-.1906	-.1846	-.2195								
150.000	.0258	.0873	.2860	.2807	-.1235	-.0964	-.1880								
165.000	.0488		.2891		.1738	-.0041	-.2901								
180.000	.0762	.1336	.2715	.3708											
320.000	.2728	.4192	.5368	.2959	-.3023	-.2556	-.2627								

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## IA81A - PRESSURE SOURCE DATA TABULATION

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ARC11-019 IA81 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB18)

ALPHA0 ( 4 ) = 4.253 BETA0 ( 2 ) = .000

SECTION ( 1 ) ORBITER FUSELAGE	DEPENDENT VARIABLE CP														
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.3205	.7301	.1836	.1733	.1735	.5992		-.5070		-.0174	-.0611	-.0729	-.0495	.0315	.1470
20.000			.2311	.1771	.1553	.2733		-.4247		-.0335					
40.000			.3896	.2048	.1492	.0677		-.4495		-.1153	-.0810	-.1180	-.0582	-.0028	.1770
55.000			.4668	.2612	.1624	-.0552		-.1297		-.2595					
70.000			.4826	.2581	.1279	-.0264		-.0332		-.1807	-.5187	-.2753	-.2260	-.1462	
90.000		.6357	.4933	.2713	.1154	-.0089		.0402		-.1512	-.5523	-.3136	-.2794	-.1445	
120.000			.4847	.3051	.0098	.1148		.2863		-.2044	-.1339	-.7109	-.2875	-.1398	
140.000										-.3043					
150.000			.4385	.3007	.0636	.1757				-.5615	-.7360	-.5556	-.2872	-.0951	
151.000									.3851						
156.000								.6962							
162.000									.4317						
165.000										-.5893	-.6611	-.4545	-.3540	-.0856	
169.000								.7693							
174.000							.8108								
180.000	1.3205	.6230	.3944	.3074	.1668	.2842		.7421		-.7506	-.7048	-.4270	-.3799	-.0826	
305.000			.4365	.2624	.1408	.0268		-.1998		-.1695					
320.000			.3301	.1793	.0398	.0568		-.4688		.0037	-.1498	-.0414	-.0226	.0043	.1530
340.000			.2605	.1539	.0406	.2556		-.3893		-.0048					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.2186	.2767	.3315	.1059	-.2999	-.2831	-.2647			-.2276	-.2388				
40.000	.2017	.2469	.2690	-.0063	-.3717	-.3057	-.2680			-.2117	-.2171				
70.000	-.0819	-.2655	-.2574	.1269	-.0623	-.2220	-.4467								
90.000	-.0443	-.2026	-.0121	.1151	-.1237	-.2186	-.3232								
105.000			.1504	.1070	-.2040	-.2848	-.3411								
110.000								-.3145							
120.000	-.0112	-.0425	.2321	.1078	-.2344	-.3164	-.3453	-.3084							
135.000			.2730	.3356	-.1858	-.2328	-.2766								
150.000	.0541	.0902	.2990	.3630	-.0933	-.1716	-.2569								
165.000	.0612		.2980		.1151	-.1086	-.2867								
180.000	.0643	.1136	.3007	.4585											
320.000	.2128	.2933	.3372	.0707	-.2780	-.2914	-.2576								



ARC11-019 IAB1 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB18)

ALPHA( 4) = 4.255 BETA( 3) = 4.115

SECTION ( 1) ORBITER FUSELAGE				DEPENDENT VARIABLE CP											
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.2918	.7455	.2275	.1588	.1600	.8206		-.5392		-.1675	-.0888	-.1132	-.0919	-.0354	.1104
20.000			.1934	.1358	.1353	.3092		-.5525		-.2051					
40.000			.2472	.1291	.1042	.0840		-.6012		-.2091	-.1271	-.1488	-.1313	.0023	.1412
55.000			.2934	.1304	.0703	-.0017		-.2615		-.4023					
70.000			.3145	.1226	.0303	.0142		-.1403		-.3045	-.6315	-.3603	-.3021	-.0687	
90.000		.4083	.3504	.1416	.0144	.0297		-.0590		-.2787	-.6644	-.4248	-.2981	-.0643	
120.000			.3742	.2086	.0558	.1590		.1757		-.3381	-.6125	-.8018	-.2814	-.0795	
140.000										-.5359					
150.000			.3718	.2577	.1467	.2434				-.6505	-.7160	-.5032	-.3944	-.0944	
151.000									.2709						
156.000								.6040							
162.000									.3394						
165.000										-.5993	-.7387	-.4571	-.4183	-.1097	
169.000								.7142							
174.000							.8488								
180.000	1.2918	.5742	.3776	.2938	.2114	.3013		.7178		-.7197	-.6478	-.4729	-.3668	-.1259	
305.000			.6060	.3812	.3072	.2079		-.1030		-.1451					
320.000			.4648	.2362	.2207	.2551		-.3989		-.1949	-.2724	.0042	.0729	.0985	.2049
340.000			.3460	.1651	.1791	.4846		-.7144		.0052					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.2028	.2949	.3998	.1899	-.2374	-.2689	-.2629		-.2170	-.2238					
40.000	.2499	.3568	.4949	.2884	-.4169	-.2310	-.2660		-.2316	-.2343					
70.000	-.0359	-.2059	-.1650	.1269	-.0944	-.2641	-.4687								
90.000	.0127	-.1378	-.0164	.1215	-.1478	-.2628	-.3584								
105.000			.0885	.1238	-.2597	-.3243	-.3753								
110.000								-.3189							
120.000	.0665	.0221	.1978	.1852	-.2844	-.3804	-.4263	-.3196							
135.000			.2637	.2771	-.2371	-.3029	-.3528								
150.000	.0926	.1105	.2637	.3058	-.1437	-.2748	-.3477								
165.000	.0885		.2657		.0379	-.2081	-.3060								
180.000	.0848	.1257	.2657	.3403											
320.000	.1908	.2560	.2559	-.2658	-.2601	-.3154	-.3020								

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## IABIA - PRESSURE SOURCE DATA TABULATION

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ARC11-019 IAB1 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB18)

ALPHA0( 5) = 6.356 BETA0 ( 1) = .011

SECTION ( 1) ORBITER FUSELAGE		DEPENDENT VARIABLE CP													
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.3143	.7178	.1337	.1532	.1669	.6401		-.2638		.0059	-.0527	-.0465	-.0183	.0564	.1647
20.000			.1820	.1579	.1493	.3793		-.3438		-.0280					
40.000			.3691	.1961	.1558	.1465		-.4250		-.0525	-.0825	-.0994	-.0347	.0309	.1917
55.000			.4593	.2659	.1767	.0862		-.1273		-.2031					
70.000			.4714	.2572	.1335	.0956		-.0307		-.1699	-.4005	-.2752	-.2200	-.1559	
90.000		.6118	.4772	.2585	.1054	.1273		.0467		-.1377	-.5388	-.3117	-.2835	-.1543	
120.000			.4500	.2720	.1237	.2267		.2897		-.1956	-.5012	-.6585	-.3474	-.1532	
140.000										-.2924					
150.000			.3908	.2565	.1618	.2761				-.5633	-.7597	-.5847	-.2927	-.0854	
151.000									.3826						
156.000								.6923							
162.000									.4232						
165.000										-.6100	-.6906	-.4833	-.3118	-.0732	
169.000								.7594							
174.000						.8838									
180.000	1.3143	.5732	.3412	.2530	.1846	.3078		.7292		-.7728	-.7248	-.4531	-.3279	-.0705	
305.000			.4269	.2638	.2261	.0993		-.1930		-.1163					
320.000			.3098	.1710	.1860	.1453		-.4101		.0530	-.1367	-.0216	-.0034	.0302	.1694
340.000			.2177	.1412	.1788	.3746		-.3520		.0052					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.2329	.2917	.3501	.1243	-.2952	-.2788	-.2575		-.2272	-.2248					
40.000	.2116	.2568	.2826	-.0203	-.3593	-.2848	-.2541		-.2154	-.2184					
70.000	-.1006	-.3048	-.3595	.0696	-.0978	-.2437	-.4542								
90.000	-.0641	-.2321	-.1150	.0381	-.1586	-.2457	-.3413								
105.000			.0860	.0628	-.2308	-.3105	-.3619								
110.000								-.3090							
120.000	-.0340	-.0954	.1843	.0776	-.2481	-.3373	-.3776	-.3130							
135.000			.2112	.3259	-.2038	-.2626	-.3036								
150.000	.0468	.0107	.2501	.3688	-.1103	-.2065	-.2785								
165.000	.0577		.2626		.0879	-.1392	-.2893								
180.000	.0621	.0336	.2707	.4879											
320.000	.2257	.3012	.3417	.0557	-.2643	-.2720	-.2528								

ORIGINAL PAGE IS  
OF POOR QUALITY

ARC11-019 IAB1 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB19) ( 02 OCT 74 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 976.0000 IN. XT  
 LREF = 1297.0000 INCHES YMRP = .0000 IN. YT  
 BREF = 1297.0000 INCHES ZMRP = 400.0000 IN. ZT  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

MACH = 1.250 RN/FT = 2.250  
 ELV-18 = 10.000 ELV-08 = 4.000  
 RUDDER = .000 SPDBRK = .000

ALPHA0(1) = -4.169 BETA0(1) = -4.086

## SECTION (1) ORBITER FUSELAGE

## DEPENDENT VARIABLE CP

X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.3483	.8482	.4068	.3388	.3639	.9765		-.2548		-.3198	-.0295	-.1176	-.2489	-.2767	-.0327
20.000			.4690	.3595	.3429	.6382		-.3167		-.2018					
40.000			.6430	.4053	.3261	.4078		-.1939		-.2540	-.2633	-.0098	-.1160	-.1122	-.1650
55.000			.7364	.5044	.3792	.3249		.1110		-.0467					
70.000			.7639	.5296	.3827	.3300		.2010		.0430	-.3405	-.1807	-.1211	-.0643	
90.000		.9554	.7791	.5525	.3973	.3615		.2648		.0745	-.2971	-.2739	-.1463	-.0677	
120.000			.7607	.5884	.4560	.4814		.5002		.0709	-.2034	-.4471	-.1861	-.0930	
140.000										.0346					
150.000			.6949	.5502	.4804	.4794				-.2263	-.4524	-.2922	-.1880	-.1355	
151.000									.6248						
156.000								.8901							
162.000									.6632						
165.000										-.3163	-.3759	-.2808	-.1968	-.1558	
169.000								.9291							
174.000							1.0434								
180.000	1.3483	.8362	.6028	.5232	.4698	.5331		.8476		-.4212	-.4021	-.2297	-.2180	-.1825	
305.000			.4058	.2921	.2799	.2208		-.1458		-.2611					
320.000			.4103	.3016	.3310	.2944		-.4652		-.2691	-.1778	-.1211	-.1577	-.0919	.0083
340.000			.4351	.3166	.3641	.5370		-.3431		-.2018					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1241	.3222	.5705	.2692	-.2231	-.2829	-.2493		-.1969	-.1927					
40.000	.0449	.1339	.2533	-.1509	-.3515	-.3283	-.3354		-.2032	-.2073					
70.000	-.0369	-.1348	-.1557	.1678	.0715	-.0534	-.2324								
90.000	-.0248	-.0757	.0296	.1411	.0422	-.0363	-.1196								
105.000			.1790	.1558	-.0334	-.0973	-.1269								
110.000								-.3016							
120.000	-.0553	-.0371	.3147	.1849	-.0340	-.1008	-.1135	-.2155							
135.000			.3617	.3486	.0057	.0127	-.0160								
150.000	-.0925	-.0384	.3572	.3680	.1153	.1163	.0159								
165.000	-.0979		.3468		.4150	.2154	-.2254								
180.000	-.1033	-.0282	.3398	.4115											
320.000	.0636	.3585	.5107	.3245	-.2838	-.2136	-.2410								

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## IAB1A - PRESSURE SOURCE DATA TABULATION

PAGE 365

ARC11-019 IAB1 LVAP(ELHL SEALED) ORB. FUSELAGE

(RET819)

ALPHA0 ( 1 ) = -4.149 BETA0 ( 2 ) = .018

SECTION ( 1 ) ORBITER FUSELAGE		DEPENDENT VARIABLE CP													
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.3743	.8547	.3964	.3220	.3413	.8556		-.2802		-.1917	-.0358	-.0381	-.0785	-.1297	-.0150
20.000			.4168	.3207	.3257	.5812		-.3070		-.2103					
40.000			.5248	.3328	.2859	.3670		-.2982		-.3139	-.1195	-.0588	-.1718	-.2882	-.0653
55.000			.5848	.3768	.2856	.2493		.0046		-.1409					
70.000			.6079	.3888	.2713	.2524		.1015		-.0500	-.4219	-.2814	-.1914	-.1009	
90.000		.7717	.6367	.4219	.2809	.2734		.1659		-.0289	-.3865	-.4019	-.1898	-.1155	
120.000			.6630	.4977	.3631	.4153		.3995		-.0630	-.3076	-.5313	-.2787	-.1306	
140.000										-.1911					
150.000			.6552	.5269	.4406	.5073				-.3320	-.4481	-.3044	-.2217	-.1424	
151.000									.5312						
156.000									.8159						
162.000									.5940						
165.000										-.3259	-.4015	-.2250	-.2246	-.1436	
169.000								.9039							
174.000						1.0219									
180.000	1.3743	.8340	.6251	.5420	.4762	.5461		.8878		-.4390	-.4373	-.1993	-.2202	-.1484	
305.000			.5553	.3826	.3259	.2599		-.0785		-.1518					
320.000			.4919	.3222	.3250	.3668		-.3552		-.2218	-.1399	-.0582	-.1869	-.0930	-.0096
340.000			.4544	.3114	.3450	.5936		-.3558		-.0502					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1003	.2171	.3217	.1717	-.2907	-.2840	-.2673		-.2314	-.2254					
40.000	.0780	.1620	.2026	-.1118	-.2968	-.2929	-.2880		-.2225	-.2203					
70.000	-.0525	-.1060	.0368	.1666	.0377	-.0923	-.2641								
90.000	-.0360	-.0548	.1428	.1561	-.0306	-.0796	-.1480								
105.000			.2249	.0966	-.0917	-.1339	-.1722								
110.000								-.3182							
120.000	-.0545	-.0033	.2612	.0508	-.0939	-.1984	-.2267	-.2519							
135.000			.3544	.3322	-.0230	-.0749	-.1081								
150.000	-.0742	-.0272	.3703	.3910	.0898	.0039	-.0778								
165.000	-.0726		.3725		.3320	.0843	-.2513								
180.000	-.0745	-.0313	.3769	.5051											
320.000	.0891	.2068	.3178	.0301	-.2792	-.2552	-.2726								

ARC11-019 1A81 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB19)

ALPHA0(1) = -4.104 BETA0(3) = 4.148

SECTION (1) ORBITER FUSELAGE		DEPENDENT VARIABLE CP													
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.3325	.8382	.3892	.3169	.3186	.9607		-.3244		-.3879	-.1205	-.0464	-.0082	-.0926	.0038
20.000			.3700	.2911	.2903	.5024		-.3413		-.4012					
40.000			.4005	.2740	.2534	.2922		-.3856		-.4075	-.0972	-.1112	-.2544	-.1454	.0187
55.000			.4294	.2654	.2105	.2087		-.0678		-.2340					
70.000			.4541	.2654	.1819	.2018		.7333		-.1357	-.5005	-.3689	-.2439	-.1176	
90.000		.5606	.4966	.2934	.1774	.2114		.0883		-.1304	-.4689	-.4828	-.2231	-.1245	
120.000			.5469	.3931	.2668	.3324		.2860		-.1773	-.3957	-.5884	-.3891	-.1697	
140.000										-.3461					
150.000			.5809	.4825	.3920	.4522			.4201	-.3915	-.4503	-.2518	-.2740	-.1949	
151.000															
156.000								.7296							
162.000									.5058						
165.000										-.3321	-.4625	-.2183	-.2399	-.2048	
169.000							.9758	.8518							
174.000															
180.000	1.3325	.7964	.6157	.5291	.4639	.5270		.8654		-.4362	-.3996	-.2379	-.2171	-.1806	
305.000			.7166	.4982	.4055	.3279		.0219		-.0477					
320.000			.5841	.3618	.3348	.4088		-.2555		-.2565	-.1189	-.1750	-.2390	-.0580	-.1867
340.000			.4917	.3176	.3320	.6410		-.4432		-.1798					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.0961	.2462	.3903	.2359	-.2457	-.2687	-.2569		-.2156	-.2118					
40.000	.0796	.2558	.4463	.2613	-.3985	-.2197	-.2480		-.2217	-.2191					
70.000	-.0163	-.0692	.0580	.2015	.0292	-.0932	-.2605								
90.000	-.0198	-.0083	.1470	.1722	-.0560	-.1043	-.1591								
105.000			.1935	.0669	-.1198	-.1310	-.1840								
110.000								-.3275							
120.000	-.0542	.0602	.2094	-.0502	-.1898	-.2745	-.2841	-.2545							
135.000			.3017	.2949	-.0776	-.1597	-.1815								
150.000	-.1061	.0080	.3250	.3442	.0321	-.1043	-.1764								
165.000	-.1103		.3313		.2585	-.0026	-.2545								
180.000	-.1115	-.0298	.3351	.4128											
320.000	.0774	.1986	.2362	-.2101	-.2836	-.2946	-.3638								

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## IA81A - PRESSURE SOURCE DATA TABULATION

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ARC11-019 IAB1 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB19)

ALPHA0( 2) = .052 BETA0( 1) = -4.119

SECTION ( 1) ORBITER FUSELAGE		DEPENDENT VARIABLE CP													
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.3772	.8758	.3544	.2339	.2981	.8939		-.2800		-.4543	-.0307	-.0817	-.1852	-.1712	.0912
20.000			.4311	.2707	.2742	.6180		-.3969		-.2779					
40.000			.6274	.3508	.2685	.2994		-.2196		-.3248	-.2906	.0417	-.1172	-.0258	-.1175
55.000			.7265	.4756	.3384	.1911		.0720		-.0584					
70.000			.7407	.4924	.3285	.2418		.1605		.0307	-.3512	-.2297	-.1178	-.1207	
90.000		.9137	.7339	.5064	.3257	.2796		.2383		.0720	-.3101	-.3287	-.1735	-.1137	
120.000			.6776	.4912	.3411	.3735		.4739		.0481	-.2457	-.4691	-.2601	-.1671	
140.000										-.0029					
150.000			.5723	.4226	.2741	.4132				-.2622	-.5120	-.3790	-.2686	-.1872	
151.000									.5863						
156.000								.8531							
162.000									.6181						
165.000										-.3707	-.4533	-.3572	-.2708	-.2021	
169.000								.8820							
174.000						1.0061									
180.000	1.3772	.7177	.4742	.3997	.2668	.4174		.7913		-.4715	-.4689	-.3113	-.2898	-.2225	
305.000			.3599	.1694	.2289	.1527		-.2007		-.3110					
320.000			.3628	.1799	.2738	.2581		-.5009		-.4358	-.1496	-.1124	-.0786	-.0739	.0384
340.000			.3857	.1958	.3081	.5097		-.3601		-.5248					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1993	.3679	.5773	.2970	-.2094	-.2831	-.2472			-.1881	-.1910				
40.000	.1017	.1914	.3196	-.1263	-.3120	-.3324	-.3529			-.1935	-.1932				
70.000	-.0828	-.2018	-.2475	.0400	-.0010	-.0880	-.2631								
90.000	-.0577	-.1283	-.1696	.0601	-.0172	-.0960	-.1698								
105.000			.0620	.1176	-.0966	-.1624	-.1902								
110.000								-.3223							
120.000	-.1143	-.1127	.2551	.1493	-.0674	-.1810	-.1609	-.2367							
135.000			.3025	.2802	-.0569	-.0648	-.0692								
150.000	-.1038	-.0268	.2999	.2882	.0171	.0480	-.0425								
165.000	-.0990		.2935		.3422	.1543	-.2348								
180.000	-.0873	.0562	.2643	.3110											
320.000	.1752	.4287	.5754	.3969	-.2685	-.1953	-.2287								

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ARC11-019 IAB1 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB19)

ALPHA0( 2) = .055 BETA0 ( 2) = -.007

SECTION ( 1) ORBITER FUSELAGE		DEPENDENT VARIABLE CP													
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.4027	.8789	.3380	.2034	.2543	.7173		-.3788		-.2676	-.0866	-.0410	-.0326	-.0753	.0484
20.000			.3633	.2050	.2362	.5493		-.3841		-.4068					
40.000			.4927	.2346	.2066	.3210		-.3339		-.4380	-.2209	-.0005	-.1644	-.1230	.0633
55.000			.5594	.3166	.2349	.1709		-.0423		-.1657					
70.000			.5782	.3372	.2206	.1545		.0590		-.0622	-.4318	-.3252	-.1994	-.1208	
90.000		.7388	.5963	.3655	.2200	.1767		.1357		-.0351	-.3996	-.4136	-.2206	-.1167	
120.000			.5963	.4164	.2667	.3146		.3821		-.0841	-.3374	-.5447	-.3173	-.1495	
140.000										-.2002					
150.000			.5530	.4212	.3197	.3869			.5007	-.3740	-.5166	-.3719	-.2737	-.1584	
151.000															
156.000								.7898							
162.000									.5538						
165.000										-.3734	-.4675	-.3097	-.2822	-.1638	
169.000								.8655							
174.000							.9219								
180.000	1.4027	.7278	.5093	.4297	.3477	.3622		.8438		-.5230	-.4988	-.2746	-.2784	-.1686	
305.000			.5284	.3255	.2818	.1195		-.1212		-.1763					
320.000			.4612	.2416	.2590	.3201		-.3812		-.3246	-.1103	-.0377	-.1189	-.0369	.0516
340.000			.4116	.2092	.2091	.4988		-.4626		-.3453					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1559	.2612	.3487	.1820	-.2487	-.2545	-.2452		-.2073	-.2029					
40.000	.1384	.2211	.2565	.0065	-.2907	-.3024	-.2879		-.1880	-.2045					
70.000	-.0655	-.1654	-.1854	.1098	-.0131	-.1131	-.2793								
90.000	-.0359	-.0909	.0017	.0774	-.0591	-.1176	-.1863								
105.000			.1350	.0863	-.1322	-.1760	-.2045								
110.000								-.3251							
120.000	-.0394	-.0021	.2247	.1502	-.0953	-.2089	-.2474	-.2557							
135.000			.2348	.2934	.0091	-.1096	-.1501								
150.000	-.0598	.0688	.2517	.3191	.0546	-.0323	-.1195								
165.000	-.0607		.2838		.2604	.0390	-.2309								
180.000	-.0633	.0615	.2981	.4090											
320.000	.1546	.2708	.3678	.1038	-.3008	-.2528	-.2611								

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## IAB1A - PRESSURE SOURCE DATA TABULATION

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ARC11-019 IAB1 LVAP(ELHL SEALED) ORB. FUSELAGE

(RET819)

ALPHA0( 2) = .067 BETA0 ( 3) = 4.107

SECTION ( 1) ORBITER FUSELAGE		DEPENDENT VARIABLE CP													
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.3622	.8594	.3528	.2280	.2357	.9346		-.3544		-.4353	-.2651	-.0837	-.0661	-.1060	.0303
20.000			.3249	.2061	.2115	.4720		-.3863		-.5933					
40.000			.3632	.1924	.1863	.2433		-.4356		-.4610	-.1247	-.0882	-.2167	-.1311	.0591
55.000			.3979	.1971	.1580	.1095		-.1242		-.2729					
70.000			.4184	.1981	.1328	.1043		-.0106		-.1682	-.5150	-.4344	-.2798	-.1181	
90.000		.5119	.4509	.2287	.1280	.1169		.0610		-.1432	-.4897	-.5056	-.2719	-.1190	
120.000			.4827	.3172	.1844	.2375		.2778		-.1938	-.4372	-.6239	-.4038	-.1450	
140.000										-.3640					
150.000			.4866	.3774	.2726	.3430				-.4385	-.5070	-.3385	-.3337	-.1975	
151.000									.3892						
156.000								.6966							
162.000									.4661						
165.000										-.3854	-.5214	-.3001	-.3071	-.2240	
169.000								.8092							
174.000							.9381								
180.000	1.3622	.6723	.5002	.4147	.3346	.4077		.8156		-.4942	-.4670	-.3211	-.2868	-.2246	
305.000			.7103	.4619	.3610	.2629		-.0213		-.0578					
320.000			.5695	.3026	.2645	.3610		-.2657		-.2974	-.1224	-.2833	-.2250	.0396	-.0108
340.000			.4828	.2322	.2430	.6168		-.5103		-.2779					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1420	.2843	.4059	.2500	-.2296	-.2589	-.2447		-.1967	-.2012					
40.000	.1644	.3338	.5159	.3514	-.3823	-.2085	-.2412		-.2034	-.2108					
70.000	-.0351	-.1362	-.1189	.1511	-.0211	-.1212	-.2897								
90.000	-.0140	-.0609	.0322	.1107	-.0561	-.1314	-.2083								
105.000			.1483	.1145	-.1333	-.1607	-.2160								
110.000								-.3350							
120.000	-.0229	.0418	.1856	-.0475	-.1773	-.2578	-.3009	-.2575							
135.000			.2391	.2305	-.0842	-.1636	-.2080								
150.000	-.0679	.0864	.2579	.2777	.0057	-.1106	-.1898								
165.000	-.0858		.2624		.1664	-.0433	-.2485								
180.000	-.0976	.0676	.2723	.3019											
320.000	.1356	.2423	.2672	-.1856	-.2497	-.2919	-.3644								



ARC11-019 IAB1 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB19)

ALPHA0 ( 3 ) = 4.242 BETA0 ( 1 ) = -4.090

SECTION ( 1 ) ORBITER FUSELAGE		DEPENDENT VARIABLE CP													
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.3652	.8884	.2945	.1022	.2347	.9049		-.2995		-.4226	-.1032	-.0306	-.0304	.0506	.1236
20.000			.3955	.1720	.2165	.6153		-.4805		-.3148					
40.000			.6184	.2950	.2391	.3655		-.2022		-.3160	-.3031	-.0163	-.0801	.0386	-.0346
55.000			.7080	.4412	.3114	.2652		.0467		-.0734					
70.000			.7096	.4498	.2872	.2320		.1285		.0209	-.3628	-.2414	-.1194	-.1276	
90.000		.8722	.6937	.4505	.2723	.2272		.2070		.0783	-.3225	-.3517	-.2026	-.1266	
120.000			.6106	.4145	.2491	.2567		.4686		.0409	-.2734	-.4976	-.3813	-.2149	
140.000										-.0207					
150.000			.4889	.3256	.2366	.2693				-.2055	-.5678	-.4767	-.3301	-.2231	
151.000									.5798						
156.000								.8479							
162.000									.6000						
165.000										-.4348	-.5161	-.4188	-.3250	-.2301	
169.000								.8691							
174.000							.9852								
180.000	1.3652	.6378	.3844	.3086	.2323	.2680		.7722		-.5348	-.5295	-.3701	-.3377	-.2154	
305.000			.3199	.0926	.2119	.0983		-.2467		-.2999					
320.000			.3170	.0614	.2575	.2137		-.5078		-.2303	-.2002	-.0428	-.0260	-.0324	.0793
340.000			.3237	.0716	.2787	.4669		-.3725		-.2817					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.2225	.3857	.5984	.2920	-.2399	-.2510	-.2349			-.1968	-.1988				
40.000	.1431	.2218	.3160	-.1002	-.3300	-.2923	-.3073			-.1790	-.1787				
70.000	-.0997	-.2501	-.3061	-.0843	-.0531	-.1228	-.2911								
90.000	-.0831	-.1829	-.2436	.0043	-.0725	-.1310	-.2106								
105.000			-.0071	.0719	-.1693	-.1835	-.2483								
110.000								-.3248							
120.000	-.1931	-.1706	.2038	.1022	-.0900	-.2448	-.2074	-.2568							
135.000			.2372	.2065	-.0970	-.1503	-.1461								
150.000	-.0878	.0336	.2382	.2174	-.0741	-.0109	-.0929								
165.000	-.0633		.2136		.2694	.1066	-.2371								
180.000	-.0429	.1235	.1875	.2610											
320.000	.2422	.4460	.5867	.3905	-.2332	-.2011	-.2201								

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## 1A81A - PRESSURE SOURCE DATA TABULATION

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ARC11-D19 1A81 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB19)

ALPHA0( 3) = 4.243 BETA0 ( 2) = .004

SECTION ( 1) ORBITER FUSELAGE				DEPENDENT VARIABLE CP											
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.3926	.8640	.2160	.0966	.1989	.6913		-.3043		-.0988	-.1782	.0158	.0188	.0074	.1173
20.000			.2595	.1001	.1709	.4738		-.5123		-.2701					
40.000			.4436	.1597	.1645	.2262		-.3128		-.4298	-.2291	-.0587	-.0480	-.0008	.1361
55.000			.5290	.2853	.2222	.1019		-.0615		-.1655					
70.000			.5446	.3028	.1964	.0598		.0385		-.0502	-.4368	-.3761	-.1683	-.1426	
90.000		.6809	.5501	.3239	.1811	.0045		.1415		-.0251	-.4058	-.4424	-.2363	-.1404	
120.000			.5264	.3475	.1941	.1598		.3885		-.0740	-.3700	-.5598	-.3588	-.1740	
140.000										-.1805					
150.000			.4686	.3306	.2307	.2142				-.4013	-.5729	-.4342	-.3262	-.1600	
151.000									.4938						
156.000								.7856							
162.000									.5390						
165.000										-.4288	-.5343	-.3743	-.3297	-.1501	
169.000								.8596							
174.000							.9632								
180.000	1.3926	.6342	.4137	.3373	.2492	.2427		.8302		-.5854	-.5528	-.3335	-.3310	-.1501	
305.000			.4975	.2681	.2573	.1368		-.1459		-.1715					
320.000			.3927	.1154	.2116	.2534		-.3555		-.3882	-.1514	-.0075	.0296	.0230	.1218
340.000			.3108	.0918	.2029	.4877		-.5595		-.1127					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.2161	.3257	.4195	.2357	-.2167	-.2339	-.2214		-.1786	-.1818					
40.000	.1912	.2735	.3353	.0280	-.2842	-.2616	-.2434		-.1767	-.1850					
70.000	-.0876	-.2263	-.2757	-.0111	-.0703	-.1476	-.3082								
90.000	-.0494	-.1514	-.1525	.0129	-.1024	-.1706	-.2303								
105.000			.0547	.0751	-.2158	-.2301	-.2638								
110.000								-.3248							
120.000	-.0456	-.0565	.1977	.0784	-.1530	-.2893	-.2692	-.2670							
135.000			.2254	.2525	-.1193	-.1783	-.2137								
150.000	-.0309	.0904	.2114	.2764	-.0130	-.0871	-.1697								
165.000	-.0322		.2309		.1854	-.0163	-.2284								
180.000	-.0322	.0929	.2395	.3652											
320.000	.2034	.3302	.4144	.1300	-.2549	-.2271	-.2252								

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ARC11-019 IAB1 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB19)

ALPHA0( 3) = 4.242 BETA0 ( 3) = 4.125

SECTION ( 1) ORBITER FUSELAGE				DEPENDENT VARIABLE CP											
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.3455	.8755	.3041	.0942	.1745	.8578		-.3649		-.4275	-.2791	-.0592	-.0277	-.0749	.0755
20.000			.2694	.0799	.1560	.4236		-.4168		-.5006					
40.000			.3102	.0949	.1433	.2053		-.4608		-.4506	-.1873	-.0448	-.1158	-.0907	.1080
55.000			.3488	.1290	.1468	.0546		-.1773		-.2801					
70.000			.3715	.1423	.1188	.0321		-.0447		-.1583	-.5188	-.4584	-.2463	-.1383	
90.000		.4562	.4043	.1802	.0866	.0334		.0610		-.1270	-.4942	-.5269	-.2893	-.1408	
120.000			.4212	.2531	.1227	.1141		.2850		-.1845	-.4648	-.6349	-.3790	-.1541	
140.000										-.3651					
150.000			.4049	.2939	.1941	.2015				-.4709	-.5700	-.4005	-.3685	-.1463	
151.000									.3795						
156.000								.6912							
162.000									.4447						
165.000										-.4412	-.5716	-.3543	-.3536	-.1772	
169.000								.7984							
174.000							.8867								
180.000	1.3455	.5846	.4053	.3248	.2413	.2208		.8013		-.5495	-.5153	-.3796	-.3365	-.2234	
305.000			.6968	.4356	.3410	.2831		-.0412		-.0908					
320.000			.5633	.2436	.2413	.3561		-.2466		-.3283	-.1199	-.2422	-.0603	.1326	.1520
340.000			.4343	.1149	.1954	.5881		-.5715		-.3139					
X/LB															
	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1890	.3136	.4271	.2629	-.1933	-.2226	-.2210		-.1759	-.1842					
40.000	.2170	.3722	.5431	.3732	-.3602	-.1765	-.2207		-.1947	-.2001					
70.000	-.0535	-.1976	-.2411	.0372	-.0268	-.1421	-.3132								
90.000	-.0175	-.1227	-.1247	.0430	-.0695	-.1532	-.2312								
105.000			.0028	.0905	-.1981	-.2105	-.2564								
110.000								-.3142							
120.000	.0003	.0092	.1539	.1916	-.1628	-.2890	-.2992	-.2686							
135.000			.2189	.2349	-.0956	-.1958	-.2453								
150.000	-.0162	.0988	.2113	.1897	-.0306	-.1391	-.2239								
165.000	-.0303		.1912		.1028	-.0823	-.2462								
180.000	-.0430	.1192	.1963	.2585											
320.000	.1839	.2725	.2913	-.1675	-.2086	-.2666	-.3087								



ARC11-019 IAB1 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB20)

ALPHA0( 1) = .018 BETA0( 2) = -4.117

## SECTION ( 1) ORBITER FUSELAGE

## DEPENDENT VARIABLE CP

X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.4605	1.0204	.4322	.1361	.1983	1.0166		-.1701		-.3233	-.0767	-.1448	-.0539	-.1860	-.1717
20.000			.5215	.2250	.1856	.7153		-.3907		-.1947					
40.000			.7231	.3628	.2522	.4823		-.1306		-.3270	-.1556	-.1790	-.0268	-.0475	-.0733
55.000			.8102	.5269	.3906	.2924		.0938		-.0152					
70.000			.8074	.5514	.3922	.2501		.1633		.0854	-.2433	-.1482	-.1324	-.0709	
90.000		.9472	.7767	.5520	.3850	.2704		.2461		.1353	-.2085	-.2353	-.1949	-.0749	
120.000			.6881	.5136	.3643	.3295		.5269		.1248	-.1541	-.3597	-.2245	-.1050	
140.000										.0869					
150.000			.5859	.4446	.3593	.3470				-.1391	-.3926	-.3107	-.2039	-.1496	
151.000									.6558						
156.000								.8993							
162.000									.6878						
165.000										-.2461	-.3466	-.2707	-.2030	-.1729	
169.000								.9276							
174.000						1.0472									
180.000	1.4605	.6920	.4906	.4253	.3499	.3430		.8442		-.3409	-.3814	-.2414	-.2131	-.1946	
305.000			.4224	.1692	.1735	.2169		-.1300		-.2197					
320.000			.4439	.1020	.1807	.3424		-.3600		-.3686	-.1638	-.1795	-.0496	.0042	.0154
340.000			.4665	.0868	.1416	.6001		-.2295		-.4317					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1301	.3574	.5824	.3566	-.2529	-.2684	-.2400			-.1825	-.1779				
40.000	.0752	.1704	.3106	-.1149	-.3151	-.3263	-.4760			-.1835	-.1760				
70.000	-.0613	-.1503	-.1945	-.0872	-.0005	-.0442	-.0674								
90.000	-.0281	-.1100	-.1634	.0608	-.0389	-.0745	-.1143								
105.000			-.1320	.1339	-.0922	-.1705	-.1596								
110.000								-.2543							
120.000	-.1146	-.1307	.1846	.1593	-.0073	-.1534	-.1780	-.2124							
135.000			.2424	.2243	-.0148	-.0746	-.0529								
150.000	-.1298	-.0878	.2384	.2293	-.0058	.0834	.0073								
165.000	-.1218		.2266		.3500	.2017	-.2010								
180.000	-.1119	-.0536	.2126	.2435											
320.000	.0953	.4045	.5877	.4417	-.2854	-.1987	-.2379								

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## IAB1A - PRESSURE SOURCE DATA TABULATION

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ARC11-019 IAB1 LVAP (ELHL SEALED) ORB. FUSELAGE

(RET20)

ALPHA0 (1) = .024 BETA0 (3) = -2.072

SECTION (1) ORBITER FUSELAGE		DEPENDENT VARIABLE CP													
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.4713	1.0258	.4354	.1141	.1573	.9811		-.1878		-.3843	-.0597	-.1506	-.0102	-.1058	-.0930
20.000			.4942	.1832	.1710	.6817		-.3886		-.2370					
40.000			.6516	.3035	.2094	.4413		-.1729		-.3809	-.1735	-.1313	-.0346	-.0866	-.0734
55.000			.7145	.4420	.3322	.2530		.0484		-.0614					
70.000			.7155	.4606	.3337	.2134		.1343		.0437	-.2780	-.2202	-.1798	-.0854	
90.000		.8580	.7073	.4808	.3312	.2300		.2283		.0899	-.2500	-.2769	-.2318	-.0835	
120.000			.6545	.4795	.3359	.3063		.4955		.0774	-.1975	-.3989	-.2531	-.1051	
140.000										.0307					
150.000			.5736	.4423	.3528	.3476				-.1884	-.3921	-.2923	-.2062	-.1544	
151.000									.6238						
156.000								.8779							
162.000									.6639						
165.000										-.2444	-.3654	-.2710	-.2065	-.1749	
169.000								.9247							
174.000							1.0610								
180.000	1.4713	.7075	.5040	.4400	.3618	.3529		.8794		-.3609	-.3753	-.2145	-.2170	-.1932	
305.000			.5072	.2373	.2179	.2209		-.0962		-.1713					
320.000			.4963	.1372	.1819	.3557		-.3110		-.3053	-.1316	-.1789	-.0406	.0156	.0240
340.000			.4864	.0854	.1318	.6026		-.2663		-.3084					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1230	.3006	.5027	.2222	-.2350	-.2577	-.2398			-.1889	-.1846				
40.000	.0845	.1852	.3070	-.0983	-.2716	-.3354	-.4609			-.1777	-.1861				
70.000	-.0725	-.1641	-.1928	-.0155	-.0075	-.0648	-.0859								
90.000	-.0357	-.1297	-.1460	.0695	-.0589	-.0911	-.1293								
105.000			.0085	.1260	-.1322	-.1692	-.1747								
110.000								-.2598							
120.000	-.0884	-.0774	.2065	.1430	-.0332	-.1796	-.2142	-.2151							
135.000			.2501	.2375	-.0097	-.0843	-.0810								
150.000	-.0816	-.0302	.2389	.2455	.0172	.0432	-.0289								
165.000	-.0754		.2371		.2943	.1373	-.2120								
180.000	-.0726	-.0203	.2395	.2929											
320.000	.1055	.3427	.4973	.3412	-.2840	-.2069	-.2579								

ARC11-019 IAB1 LVAP(ELHL SEALED) ORB. FUSELAGE

(RET820)

ALPHA0( 1) = .023 BETA0( 4) = -.006

## SECTION ( 1) ORBITER FUSELAGE

## DEPENDENT VARIABLE CP

X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.4719	1.0280	.4367	.1084	.1615	.9028		-.1942		-.3859	-.0704	-.1008	.0587	-.0031	.0012
20.000			.4705	.1484	.1581	.6259		-.3268		-.3068					
40.000			.5917	.2399	.1438	.3966		-.2136		-.4200	-.1484	-.0952	-.0204	-.2101	-.1191
55.000			.6394	.3561	.2573	.2122		.0150		-.1053					
70.000			.6451	.3852	.2687	.1750		.1097		.0101	-.3251	-.2959	-.1569	-.0880	
90.000		.7868	.6505	.4175	.2740	.1813		.2122		.0495	-.2916	-.3145	-.2495	-.0957	
120.000			.6202	.4469	.3094	.2766		.4623		.0309	-.2384	-.4292	-.2772	-.1034	
140.000										-.0735					
150.000			.5665	.4444	.3516	.3373				-.2320	-.3907	-.2812	-.2151	-.1517	
151.000									.5823						
156.000								.8472							
162.000									.6353						
165.000										-.2413	-.3699	-.2391	-.2141	-.1771	
169.000								.9235							
174.000						1.0396									
180.000	1.4719	.7040	.5216	.4520	.3769	.3648		.9056		-.3817	-.3764	-.1893	-.2123	-.1802	
305.000			.5943	.3345	.3006	.2541		-.0444		-.1282					
320.000			.5536	.1981	.2172	.4033		-.2557		-.3774	-.0884	-.1939	-.0283	.0055	-.0035
340.000			.5074	.1106	.1871	.6522		-.3988		-.2463					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1166	.2636	.3911	.2643	-.2354	-.2549	-.2380			-.2038	-.1976				
40.000	.0952	.2168	.2800	.0227	-.3018	-.3377	-.3854			-.1883	-.2007				
70.000	-.0825	-.1696	-.1808	.0084	-.0286	-.0840	-.1046								
90.000	-.0515	-.1209	-.0502	.0550	-.0791	-.1064	-.1263								
105.000			.1073	.0829	-.1706	-.1498	-.1707								
110.000								-.2597							
120.000	-.0670	-.0449	.1895	.1370	-.0341	-.1791	-.2495	-.2299							
135.000			.1824	.2332	.0487	-.0618	-.1083								
150.000	-.0676	-.0189	.1989	.2713	.0744	.0139	-.0639								
165.000	-.0661		.2302		.2751	.0868	-.2138								
180.000	-.0670	-.0282	.2454	.3743											
320.000	.0952	.2903	.4197	.1488	-.2894	-.2641	-.3174								

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ARC11-019 1A81 LVAP(ELHL SEALED) ORB. FUSELAGE

(RET820)

ALPHA0 (1) = .030 BETA0 (5) = 2.059

SECTION (1) ORBITER FUSELAGE		DEPENDENT VARIABLE CP													
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.4484	1.0228	.4537	.1653	.2527	.9922		-.2026		-.3482	-.1644	.0066	.0025	-.0374	.0013
20.000			.4541	.1665	.2280	.6127		-.2423		-.4212					
40.000			.5301	.2200	.2058	.3797		-.2604		-.3423	-.0862	-.0918	-.0552	-.1286	-.1792
55.000			.5629	.2955	.2221	.1998		-.0240		-.1351					
70.000			.5714	.3187	.2237	.1769		.0927		-.0210	-.3544	-.3516	-.1962	-.0976	
90.000		.6779	.5837	.3589	.2330	.1775		.1930		.0156	-.3178	-.3574	-.2726	-.1074	
120.000			.5714	.4108	.2751	.2500		.4220		-.0110	-.2706	-.4590	-.2905	-.1154	
140.000										-.1523					
150.000			.5481	.4380	.3363	.3253				-.2597	-.3867	-.2821	-.2281	-.1860	
151.000									.5362						
156.000								.8027							
162.000									.6025						
165.000										-.2466	-.3799	-.2124	-.2146	-.1931	
169.000								.8994							
174.000							.9953								
180.000	1.4484	.6870	.5342	.4611	.3750	.3568		.8960		-.3652	-.3702	-.2038	-.2085	-.1773	
305.000			.7024	.4512	.3703	.2965		-.0151		-.0949					
320.000			.6306	.2914	.2804	.4452		-.2119		-.3894	-.0384	-.2416	-.0918	.0611	-.1309
340.000			.5521	.1881	.2776	.6995		-.4185		-.2327					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1152	.2700	.3711	.2396	-.2336	-.2577	-.2409		-.2021	-.1968					
40.000	.0954	.2752	.4259	.2458	-.3513	-.2522	-.2991		-.1944	-.2005					
70.000	-.0807	-.1656	-.1431	.0564	-.0210	-.0860	-.1192								
90.000	-.0483	-.1126	.0329	.0462	-.0720	-.0999	-.1316								
105.000			.1284	.0909	-.1591	-.1456	-.1774								
110.000								-.2607							
120.000	-.0569	-.0393	.1458	-.0278	-.0557	-.2080	-.2907	-.2313							
135.000			.2148	.2039	-.0205	-.1019	-.1360								
150.000	-.0656	-.0365	.2356	.2481	.0490	-.0359	-.1004								
165.000	-.0690		.2390		.2560	.0501	-.2229								
180.000	-.0727	-.0331	.2340	.3114											
320.000	.1071	.2514	.2898	-.0297	-.3081	-.2845	-.3972								

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ARC11-019 IAB1 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB20)

ALPHA0 ( 1 ) = .032 BETA0 ( 6 ) = 4.116

## SECTION ( 1 ) ORBITER FUSELAGE

## DEPENDENT VARIABLE CP

X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.3892	1.0161	.4467	.1562	.2216	1.0106		-.2290		-.3090	-.2062	-.0937	.0309	-.0036	.0012
20.000			.4157	.1411	.1993	.5713		-.2761		-.4409					
40.000			.4435	.1733	.1863	.3401		-.3090		-.3397	-.1506	-.1384	-.1055	-.1095	-.0871
55.000			.4653	.2203	.1668	.2037		-.0602		-.1765					
70.000			.4779	.2389	.1643	.1452		.0778		-.0661	-.3846	-.4011	-.2355	-.1216	
90.000		.5395	.4991	.2847	.1733	.1333		.1651		-.0267	-.3566	-.3929	-.2980	-.1237	
120.000			.5136	.3618	.2281	.2065		.3718		-.0586	-.3072	-.4945	-.3288	-.1471	
140.000										-.2140					
150.000			.5111	.4126	.3073	.2872				-.2879	-.3921	-.2654	-.2574	-.2296	
151.000									.4812						
156.000								.7656							
162.000									.5547						
165.000										-.2541	-.3967	-.2158	-.2312	-.2060	
169.000								.8699							
174.000						.9443									
180.000	1.3892	.6614	.5209	.4466	.3608	.3242		.8816		-.3523	-.3669	-.2450	-.2173	-.1853	
305.000			.7944	.5197	.4064	.3045		.0194		-.0517					
320.000			.6828	.3253	.2563	.4324		-.1651		-.2942	.0151	-.2805	-.0920	.0235	-.1484
340.000			.5680	.1894	.2172	.7034		-.4234		-.2171					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.0959	.2567	.4043	.2871	-.2422	-.2698	-.2523		-.1989	-.2001					
40.000	.0362	.2858	.4951	.3671	-.3672	-.2413	-.2647		-.2023	-.1989					
70.000	-.0679	-.1490	-.1120	.0706	-.0204	-.0953	-.1385								
90.000	-.0422	-.0989	.0192	.0648	-.0724	-.1278	-.1531								
105.000			.1237	.0787	-.1550	-.1640	-.1946								
110.000								-.2753							
120.000	-.0567	-.0301	.1438	-.0322	-.1018	-.2480	-.3460	-.2421							
135.000			.1996	.1955	-.0214	-.1332	-.1791								
150.000	-.0871	-.0332	.2108	.2230	.0541	-.0724	-.1472								
165.000	-.0973		.2092		.1859	.0092	-.2362								
180.000	-.1100	-.0577	.2179	.2669											
320.000	-.0972	.2409	.2880	-.1095	-.2942	-.2908	-.4447								

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ARC11-019 IAB1 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB20)

ALPHA0 (1) = .044 BETA0 (7) = 6.175

SECTION (1) ORBITER FUSELAGE

DEPENDENT VARIABLE CP

X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.3590	.9954	.4351	.1499	.1845	.9997		-.2393		-.2748	-.2764	-.1734	.0456	-.0387	-.1265
20.000			.3739	.1116	.1759	.5225		-.2880		-.4115					
40.000			.3560	.1239	.1579	.2897		-.3531		-.3470	-.1470	-.1541	-.1445	-.0737	-.0193
55.000			.3657	.1468	.1193	.1663		-.0964		-.2063					
70.000			.3919	.1654	.1063	.1147		.0615		-.0893	-.4057	-.4240	-.2653	-.1263	
90.000		.4171	.4278	.2139	.1159	.0997		.1463		-.0549	-.3806	-.4160	-.3065	-.1272	
120.000			.4546	.3088	.1744	.1510		.3321		-.0971	-.3306	-.5051	-.3526	-.1684	
140.000															
150.000			.4610	.3772	.2694	.2272									
151.000									.4217						
156.000								.7203							
162.000									.5108						
165.000															
169.000								.8385		-.2770	-.3995	-.2241	-.2361	-.2249	
174.000							.9422								
180.000	1.3590	.6265	.4919	.4204	.3369	.2960		.8379		-.3465	-.3415	-.2628	-.2152	-.2064	
305.000			.8772	.5995	.4503	.3403		.0643		.0028					
320.000			.7269	.3747	.2491	.4485		-.1212		-.2370	.0602	-.2441	-.0581	-.1466	-.0899
340.000			.5763	.2003	.1650	.7222		-.4563		-.1786					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.0903	.2390	.3921	.2819	-.2416	-.2630	-.2467		-.1946	-.1937					
40.000	.0259	.3251	.5543	.4550	-.3598	-.2147	-.2452		-.1999	-.1989					
70.000	-.0596	-.1438	-.0976	.0921	-.0152	-.1031	-.1420								
90.000	-.0397	-.0942	.0290	.0822	-.0635	-.1306	-.1702								
105.000			.1166	.0955	-.1470	-.1621	-.2021								
110.000								-.2870							
120.000	-.0648	-.0174	.1296	-.0554	-.1306	-.2749	-.3778	-.2526							
135.000			.1497	.1367	-.0573	-.1655	-.2151								
150.000	-.1187	-.0249	.1621	.1596	-.0062	-.1346	-.1832								
165.000	-.1475		.1720		.1698	-.0329	-.2405								
180.000	-.1847	-.1091	.1825	.1846											
320.000	.0928	.2376	.2931	-.1457	-.2791	-.2886	-.4395								

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## IA81A - PRESSURE SOURCE DATA TABULATION

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ARC11-019 IA81 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB21)

ALPHA0 ( 1 ) = .045 BETA0 ( 2 ) = -4.114

SECTION ( 1 ) ORBITER FUSELAGE		DEPENDENT VARIABLE CP													
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.3768	.8729	.3533	.2284	.2936	.9589		-.2900		-.4687	-.0210	-.0890	-.1914	-.1744	.0812
20.000			.4283	.2666	.2672	.6186		-.4107		-.2855					
40.000			.6241	.3448	.2631	.3659		-.2325		-.3366	-.2919	.0335	-.1201	-.0325	-.1210
55.000			.7212	.4676	.3324	.2510		.0624		-.0713					
70.000			.7383	.4838	.3241	.2423		.1542		.0265	-.3602	-.2249	-.1242	-.1245	
90.000		.9111	.7341	.4994	.3222	.2702		.2283		.0634	-.3171	-.3301	-.1756	-.1071	
120.000			.6759	.4889	.3354	.3762		.4649		.0390	-.2504	-.4735	-.2644	-.1649	
140.000										-.0115					
150.000			.5739	.4231	.3380	.4163				-.2705	-.5169	-.3807	-.2714	-.1955	
151.000									.5810						
156.000								.8475							
162.000									.6125						
165.000										-.3758	-.4598	-.3589	-.2736	-.2076	
169.000								.8790							
174.000						1.0061									
180.000	1.3768	.7192	.4772	.3989	.3335	.4170		.7891		-.4770	-.4824	-.3131	-.2928	-.2279	
305.000			.3607	.1686	.2298	.1466		-.2054		-.3162					
320.000			.3623	.1743	.2731	.2535		-.5078		-.4419	-.1560	-.1109	-.0768	-.0764	.0293
340.000			.3817	.1963	.3049	.5130		-.3722		-.5038					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1894	.3645	.5710	.2920	-.2112	-.2811	-.2519		-.1966	-.1918					
40.000	.0939	.1827	.3114	-.1246	-.3198	-.3347	-.4018		-.1928	-.1937					
70.000	-.0892	-.2063	-.2503	.0392	-.0013	-.0489	-.0854								
90.000	-.0631	-.1309	-.1673	.0614	-.0172	-.0899	-.1128								
105.000			.0668	.1136	-.0975	-.1636	-.1803								
110.000															
120.000	-.1197	-.1138	.2532	.1489	-.0718	-.1838	-.1656	-.2732							
135.000			.2993	.2731	-.0597	-.0708	-.0752	-.2309							
150.000	-.1092	-.0308	.2952	.2899	.0162	.0438	-.0440								
165.000	-.1028		.2892		.3392	.1505	-.2188								
180.000	-.0933	.0551	.2634	.3160											
320.000	.1633	.4231	.5659	.3896	-.2950	-.2223	-.2494								

ARC11-019 IAB1 LVAP(ELHL SEALED) ORB. FUSELAGE

(RET821)

ALPHA0 (1) = .047 BETA0 (3) = -2.070

## SECTION (1) ORBITER FUSELAGE

## DEPENDENT VARIABLE CP

X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.4058	.8884	.3426	.1799	.2695	.9344		-.2942		-.3585	-.0758	-.0112	-.0566	-.0726	.0494
20.000			.3978	.2185	.2480	.6017		-.4148		-.3330					
40.000			.5602	.2923	.2353	.3635		-.2742		-.4148	-.2905	-.0163	-.1476	-.1256	-.0934
55.000			.6418	.3961	.2860	.2176		.0167		-.1129					
70.000			.6541	.4145	.2742	.2010		.1028		-.0176	-.3923	-.2736	-.1656	-.1221	
90.000		.8238	.6631	.4357	.2733	.2266		.1777		.0160	-.3525	-.3704	-.2047	-.1177	
120.000			.6354	.4569	.3030	.3471		.4271		-.0182	-.2892	-.5052	-.2916	-.1549	
140.000										-.0796					
150.000			.5669	.4262	.3302	.4102				-.3175	-.5126	-.3685	-.2658	-.1699	
151.000									.5450						
156.000								.8264							
162.000									.5868						
165.000										-.3688	-.4547	-.3493	-.2718	-.1778	
169.000								.8771							
174.000						1.0112									
180.000	1.4058	.7312	.4953	.4195	.3433	.4271		.8271		-.4919	-.4970	-.2815	-.2844	-.1877	
305.000			.4440	.2176	.2509	.1594		-.1566		-.2517					
320.000			.4075	.1571	.2563	.2912		-.4434		-.4101	-.1531	-.0906	-.0780	-.0731	.0336
340.000			.3942	.1616	.2870	.5368		-.3833		-.3980					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1462	.3024	.4836	.1741	-.2216	-.2815	-.2598		-.2068	-.1976					
40.000	.1082	.1850	.2651	-.1725	-.2777	-.3296	-.3683		-.2074	-.2042					
70.000	-.0880	-.1829	-.2264	.0809	-.0037	-.0677	-.1097								
90.000	-.0594	-.1045	-.0755	.0755	-.0376	-.1047	-.1335								
105.000			.1157	.1167	-.1073	-.1738	-.1938								
110.000								-.2804							
120.000	-.0661	-.0596	.2499	.1354	-.0971	-.2109	-.2084	-.2471							
135.000			.2993	.2766	-.0563	-.0982	-.1116								
150.000	-.0709	.0488	.2762	.2912	.0178	.0068	-.0833								
165.000	-.0721		.2778		.2921	.0960	-.2261								
180.000	-.0693	.0834	.2825	.3438											
320.000	.1288	.3488	.4868	.2931	-.3043	-.2280	-.2585								

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ARC11-019 1A81 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB21)

ALPHA0(1) = .054 BETA0(4) = -.008

SECTION (1) ORBITER FUSELAGE

DEPENDENT VARIABLE CP

X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.4018	.8799	.3365	.2036	.2556	.8094		-.3102		-.2594	-.0835	-.0419	-.0248	-.0716	.0503
20.000			.3643	.2001	.2369	.5558		-.3944		-.3867					
40.000			.4937	.2352	.2043	.3273		-.3259		-.4483	-.2105	.0048	-.1615	-.1333	.0630
55.000			.5618	.3197	.2359	.1786		-.0347		-.1629					
70.000			.5811	.3393	.2230	.1589		.0618		-.0608	-.4284	-.3188	-.1932	-.1204	
90.000		.7402	.5982	.3719	.2226	.1864		.1384		-.0353	-.3963	-.4079	-.2171	-.1144	
120.000			.5540	.4190	.2721	.3169		.3854		-.0790	-.3356	-.5374	-.3134	-.1480	
140.000										-.1940					
150.000			.5505	.4225	.3264	.3961				-.3685	-.5160	-.3714	-.2716	-.1590	
151.000									.5015						
156.000								.7928							
162.000									.5549						
165.000										-.3698	-.4696	-.3102	-.2785	-.1641	
169.000							.8676								
174.000						.9907									
180.000	1.4018	.7263	.5034	.4280	.3525	.4350		.8444		-.5184	-.5008	-.2696	-.2776	-.1685	
305.000			.5227	.3223	.2830	.1909		-.1198		-.1835					
320.000			.4601	.2375	.2651	.3271		-.3823		-.3384	-.1026	-.0383	-.1138	-.0390	.0510
340.000			.4117	.2030	.2709	.5662		-.4681		-.3089					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1577	.2683	.3642	.1905	-.2494	-.2681	-.2487		-.2107	-.2037					
40.000	.1403	.2205	.2563	-.0118	-.3029	-.2963	-.2987		-.1961	-.2025					
70.000	-.0621	-.1641	-.1834	.1101	-.0130	-.0836	-.1219								
90.000	-.0371	-.0900	.0043	.0778	-.0567	-.1175	-.1352								
105.000			.1385	.0927	-.1304	-.1789	-.1942								
110.000								-.2744							
120.000	-.0371	-.0030	.2300	.1446	-.1004	-.2081	-.2472	-.2560							
135.000			.2396	.3044	.0107	-.1074	-.1486								
150.000	-.0589	.0746	.2539	.3250	.0570	-.0307	-.1201								
165.000	-.0596		.2839		.2602	.0447	-.2288								
180.000	-.0612	.0584	.3004	.4202											
320.000	.1587	.2810	.3815	.1139	-.3159	-.2591	-.2697								

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ARC11-019 1A81 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB21)

ALPHA0 (1) = .082 BETA0 (5) = 2.056

SECTION (1) ORBITER FUSELAGE				DEPENDENT VARIABLE CP											
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.3927	.8800	.3609	.2405	.2685	.9535		-.3367		-.4933	-.1561	-.0903	-.0526	-.0914	.0369
20.000			.3586	.2262	.2463	.5190		-.3685		-.4442					
40.000			.4387	.2319	.2086	.2920		-.3748		-.4152	-.1459	-.0387	-.1718	-.1135	.0813
55.000			.4852	.2668	.2032	.1386		-.0810		-.2123					
70.000			.5059	.2776	.1832	.1329		.0291		-.1094	-.4719	-.3933	-.2389	-.1192	
90.000		.6381	.5292	.3102	.1781	.1541		.1030		-.0917	-.4430	-.4592	-.2569	-.1151	
120.000			.5440	.3758	.2327	.2841		.3399		-.1316	-.3901	-.5850	-.3582	-.1428	
140.000										-.2882					
150.000			.5227	.4052	.3006	.3732				-.4040	-.5149	-.3820	-.3024	-.1601	
151.000									.4523						
156.000								.7485							
162.000									.5159						
165.000										-.3766	-.5057	-.2953	-.2973	-.1731	
169.000								.8441							
174.000							.9690								
180.000	1.3927	.7043	.5066	.4266	.3429	.4193		.8381		-.5046	-.4990	-.2840	-.2863	-.1893	
305.000			.6235	.4044	.3256	.2338		-.0848		-.1091					
320.000			.5301	.2900	.2760	.3648		-.3347		-.3805	-.1364	-.0816	-.1775	.0302	.0632
340.000			.4543	.2434	.2763	.6060		-.5219		-.2993					
X/LB															
	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1628	.2749	.3675	.2084	-.2458	-.2665	-.2483		-.2099	-.2061					
40.000	.1555	.2813	.4192	.2205	-.3841	-.2427	-.2604		-.2061	-.2064					
70.000	-.0408	-.1582	-.1528	.1336	-.0172	-.1066	-.1452								
90.000	-.0167	-.0843	.0339	.0949	-.0685	-.1387	-.1655								
105.000			.1509	.1345	-.1412	-.1913	-.2153								
110.000								-.2576							
120.000	-.0256	.0209	.2223	.0098	-.1282	-.2426	-.2944	-.2585							
135.000			.2623	.2276	-.0774	-.1518	-.1868								
150.000	-.0570	.0682	.2858	.2841	.0082	-.0906	-.1687								
165.000	-.0687		.2874		.2255	-.0046	-.2373								
180.000	-.0726	.0901	.2849	.3586											
320.000	.1455	.2391	.2690	-.0942	-.3128	-.2991	-.3532								

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ARC11-019 IAB1 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB21)

ALPHA( 1 ) = .087 BETA( 6 ) = 4.111

## SECTION ( 1 ) ORBITER FUSELAGE

## DEPENDENT VARIABLE CP

X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.3615	.8592	.3505	.2235	.2370	.9314		-.3584		-.4294	-.2538	-.0801	-.0681	-.1072	.0284
20.000			.3236	.2022	.2133	.4724		-.3940		-.5898					
40.000			.3625	.1915	.1850	.2429		-.4318		-.4597	-.1330	-.0768	-.2149	-.1264	.0570
55.000			.3968	.1934	.1600	.1041		-.1214		-.2659					
70.000			.4194	.1934	.1349	.1030		-.0085		-.1645	-.5102	-.4449	-.2834	-.1135	
90.000		.5096	.4531	.2298	.1276	.1143		.0636		-.1412	-.4815	-.5057	-.2831	-.1179	
120.000			.4802	.3171	.1810	.2376		.2795		-.1901	-.4328	-.6219	-.4064	-.1466	
140.000															
150.000			.4832	.3761	.2685	.3431				-.4355	-.5086	-.3441	-.3326	-.2024	
151.000									.3925						
156.000								.6958							
162.000									.4688						
165.000										-.3826	-.5233	-.2995	-.3064	-.2310	
169.000								.8074							
174.000						.9372									
180.000	1.3615	.6685	.4951	.4149	.3297	.4071		.8162		-.4912	-.4732	-.3257	-.2871	-.2221	
305.000			.7055	.4628	.3583	.2610		-.0205		-.0569					
320.000			.5692	.3027	.2595	.3584		-.2691		-.3003	-.1152	-.2812	-.2196	.0383	-.0094
340.000			.4630	.2320	.2384	.6170		-.5199		-.2790					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1353	.2843	.4030	.2511	-.2395	-.2661	-.2569		-.2052	-.2064					
40.000	.1585	.3332	.5139	.3536	-.3884	-.2242	-.2572		-.2093	-.2080					
70.000	-.0396	-.1432	-.1313	.1558	-.3337	-.0832	-.1320								
90.000	-.0151	-.0650	.0282	.1094	-.0753	-.1385	-.1552								
105.000			.1457	.1174	-.1629	-.1699	-.1968								
110.000								-.2999							
120.000	-.0209	.0380	.1810	-.0429	-.1791	-.2814	-.2988	-.2606							
135.000			.2380	.2293	-.0892	-.1749	-.2031								
150.000	-.0644	.0879	.2568	.2763	.0073	-.1320	-.1936								
165.000	-.0832		.2609		.1663	-.0459	-.2429								
180.000	-.0952	.0685	.2739	.3077											
320.000	.1365	.2404	.2698	-.1817	-.2797	-.3116	-.4147								



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## 1A81A - PRESSURE SOURCE DATA TABULATION

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ARC11-019 1A81 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB21)

ALPHA0 ( 1 ) = .091 BETA0 ( 7 ) = 6.170

SECTION ( 1 ) ORBITER FUSELAGE	DEPENDENT VARIABLE CP														
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.3308	.8470	.3420	.1908	.1917	.9189		-.3602		-.3760	-.3492	-.0570	.0347	-.1435	.0257
20.000			.2871	.1544	.1641	.4187		-.4073		-.5548					
40.000			.2974	.1357	.1442	.1930		-.4867		-.4733	-.1497	-.0962	-.1940	-.1192	.0613
55.000			.3071	.1183	.1119	.0925		-.1523		-.3074					
70.000			.3320	.1192	.0865	.0739		-.0354		-.1985	-.5419	-.4651	-.3158	-.1221	
90.000		.3803	.3743	.1550	.0707	.0759		.0392		-.1805	-.5231	-.5405	-.2988	-.1268	
120.000			.4128	.2526	.1201	.1878		.2281		-.2368	-.4667	-.6471	-.4479	-.1549	
140.000										-.4171					
150.000			.4276	.3315	.2209	.2956				-.4621	-.5314	-.3357	-.3532	-.2694	
151.000									.3332						
156.000								.6551							
162.000									.4242						
165.000										-.4136	-.5333	-.3127	-.3141	-.2786	
169.000								.7827							
174.000						.8926									
180.000	1.3308	.6240	.4644	.3802	.2948	.3820		.7808		-.4939	-.4377	-.3587	-.2842	-.2599	
305.000			.7846	.5209	.3931	.3011		.0423		.0032					
320.000			.6133	.3210	.2583	.3814		-.2139		-.2409	-.0943	-.2682	-.1905	-.0232	-.1909
340.000			.4764	.2098	.2084	.6306		-.5450		-.2412					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1306	.2737	.3902	.2066	-.2487	-.2768	-.2650		-.2071	-.2062					
40.000	.1807	.3715	.5657	.4417	-.3990	-.2318	-.2641		-.2195	-.2125					
70.000	-.0095	-.0889	-.0930	.2034	-.0149	-.1151	-.1688								
90.000	.0079	-.0156	.0432	.1742	-.0695	-.1576	-.1853								
105.000			.1511	.1711	-.1310	-.1814	-.2307								
110.000								-.2799							
120.000	-.0121	.0956	.1886	-.0108	-.1649	-.2987	-.3583	-.2646							
135.000			.2044	.2166	-.0812	-.2072	-.2558								
150.000	-.0610	.1229	.2149	.2417	-.0251	-.1732	-.2370								
165.000	-.0985		.2377		.1829	-.0747	-.2583								
180.000	-.1382	.0600	.2628	.3235											
320.000	.1476	.2508	.2688	-.1868	-.2768	-.3133	-.4857								

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## IABIA - PRESSURE SOURCE DATA TABULATION

PAGE 387

ARC11-019 IAB1 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB22) ( 03 OCT 74 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 976.0000 IN. XT  
 LREF = 1297.0000 INCHES YMRP = .0000 IN. YT  
 BREF = 1297.0000 INCHES ZMRP = 400.0000 IN. ZT  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

MACH = 1.100 RN/FT = 2.250  
 ELV-1B = .000 ELV-OB = .000  
 RUDDER = .000 SPDBRK = .000

ALPHA( 1 ) = .039 BETA( 1 ) = -6.151

## SECTION ( 1 ) ORBITER FUSELAGE

## DEPENDENT VARIABLE CP

X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.2704	.7511	.3292	.2507	.2592	.8990		-.4292		-.1754	-.1816	-.1883	-.2804	.0408	.1584
20.000			.4027	.2841	.2589	.5355		-.4252		-.2297					
40.000			.5976	.3497	.2798	.3086		-.3186		-.1674	-.0045	-.0733	-.1801	-.0410	.2162
55.000			.7031	.4628	.3534	.2708		.0183		-.0997					
70.000			.7265	.4790	.3463	.2892		.1105		-.0230	-.3748	-.1562	-.1724	-.0939	
90.000		.9268	.7282	.4922	.3487	.3216		.1778		.0132	-.3981	-.2928	-.2056	-.1070	
120.000			.6784	.4922	.3726	.4094		.4189		-.0042	-.3162	-.5495	-.2609	-.2079	
140.000										-.0523					
150.000			.5705	.4135	.3556	.4220				-.2436	-.6695	-.5119	-.2783	-.2553	
151.000									.5254						
156.000								.8020							
162.000									.5498						
165.000										-.5415	-.6204	-.4753	-.3065	-.2770	
169.000								.8194							
174.000						.9460									
180.000	1.2704	.7102	.4450	.3713	.3283	.3941		.6877		-.6549	-.5558	-.4364	-.3524	-.2526	
305.000			.2512	.1526	.1372	.0522		-.3652		-.4579					
320.000			.2902	.1829	.1989	.0985		-.7242		-.1914	-.2773	-.2083	-.1710	-.0652	.0760
340.000			.3436	.2153	.2551	.3621		-.5306		-.0685					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
FHI															
.000	.2182	.3723	.5816	.2437	-.3762	-.3369	-.3464		-.2751	-.2710					
40.000	.1304	.1903	.2807	-.1332	-.4828	-.3690	-.3674		-.2541	-.2460					
70.000	-.0574	-.1999	-.2486	.2174	.0499	-.0278	-.0543								
90.000	-.0338	-.1479	-.0133	.2312	.0148	-.1023	-.1017								
105.000			.1805	.2454	-.0689	-.1603	-.1247								
110.000								-.2543							
120.000	-.0882	-.0977	.3479	.2476	-.1104	-.1643	-.1647	-.2282							
135.000			.3992	.3481	-.1094	-.0594	-.1071								
150.000	.0398	.0356	.3959	.3387	-.0143	.0364	-.0875								
165.000	.0620		.3591		.3020	.1230	-.2699								
180.000	.0701	.1227	.3274	.3890											
320.000	.2518	.4371	.5733	.3502	-.3197	-.3217	-.3098								

ORIGINAL PAGE IS  
 OF POOR QUALITY

ARC11-019 IA81 LVAP(ELHL SEALED) ORB. FUSELAGE

(RET822)

ALPHA0( 1) = .042 BETA0( 2) = -4.101

SECTION ( 1) ORBITER FUSELAGE				DEPENDENT VARIABLE CP											
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.2929	.7586	.3162	.2440	.2547	.8907		-.4428		-.0622	-.1542	-.1417	-.1173	-.0116	.1393
20.000			.3762	.2669	.2490	.5181		-.4536		-.0809					
40.000			.5411	.3146	.2487	.2860		-.3582		-.3763	-.0415	-.0998	-.1765	-.0534	.1932
55.000			.6341	.4019	.2896	.2375		-.0262		-.1680					
70.000			.6557	.4129	.2799	.2421		.0696		-.0866	-.4987	-.2008	-.1658	-.0999	
90.000		.8474	.6632	.4338	.2883	.2717		.1410		-.0552	-.4534	-.3112	-.2163	-.1073	
120.000			.6409	.4583	.3321	.3885		.3839		-.0698	-.3673	-.6097	-.2487	-.1845	
140.000										-.1231					
150.000			.5624	.4190	.3518	.4207				-.4188	-.6675	-.4807	-.2628	-.1959	
151.000									.4920						
156.000								.7806							
162.000									.5291						
165.000										-.5312	-.5848	-.4630	-.3033	-.1713	
169.000								.8166							
174.000						.9525									
180.000	1.2929	.7230	.4688	.3925	.3440	.4106		.7298		-.6412	-.6007	-.3857	-.3524	-.1451	
305.000			.3227	.1952	.1662	.0822		-.3075		-.3868					
320.000			.3250	.1983	.2168	.1566		-.6571		-.1404	-.2484	-.1574	-.1407	-.0377	.0825
340.000			.3488	.2174	.2548	.3949		-.5466		-.0567					
X/LB															
	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.2272	.3628	.5582	.2308	-.3910	-.3248	-.3348		-.2656	-.2720					
40.000	.1441	.1991	.2902	-.1479	-.4310	-.3538	-.3446		-.2508	-.2390					
70.000	-.0236	-.1916	-.1651	.2069	.0254	-.0613	-.1071								
90.000	.0058	-.1383	.0531	.2110	-.0143	-.1280	-.1515								
105.000			.2037	.2234	-.1064	-.1858	-.1771								
110.000								-.3130							
120.000	-.0191	-.0452	.3410	.2228	-.1475	-.1950	-.2082	-.2375							
135.000			.3979	.3638	-.1253	-.0986	-.1421								
150.000	.0412	.1141	.3949	.3678	-.0277	-.0168	-.1185								
165.000	.0624		.3798		.2476	.0590	-.2705								
180.000	.0691	.1747	.3488	.4169											
320.000	.2305	.4107	.5304	.2958	-.3144	-.2897	-.2978								

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## IABIA - PRESSURE SOURCE DATA TABULATION

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ARC11-019 IAB1 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB22)

ALPHA0 ( 1 ) = .047 BETA0 ( 3 ) = -2.062

## SECTION ( 1 ) ORBITER FUSELAGE

## DEPENDENT VARIABLE CP

X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.3101	.7658	.3054	.2281	.2363	.8525		-.4393		-.0844	-.1269	-.1187	-.0923	-.0092	.1139
20.000			.3462	.2362	.2208	.4919		-.5224		-.0550					
40.000			.4852	.2718	.2056	.2600		-.4005		-.3259	-.0736	-.1025	-.1731	-.0380	.1661
55.000			.5604	.3327	.2295	.2013		-.0658		-.2239					
70.000			.5841	.3465	.2164	.2052		.0308		-.1383	-.5386	-.2363	-.1989	-.1207	
90.000		.7631	.5978	.3758	.2289	.2324		.0986		-.1085	-.5011	-.3135	-.2256	-.1253	
120.000			.5985	.4198	.2977	.3537		.3391		-.1279	-.4103	-.6550	-.2317	-.1598	
140.000										-.1913					
150.000			.5498	.4141	.3402	.4122				-.4659	-.6680	-.4769	-.2672	-.1261	
151.000									.4514						
156.000								.7503							
162.000									.4962						
165.000										-.5304	-.5484	-.4181	-.3247	-.1099	
169.000								.8071							
174.000							.9448								
180.000	1.3101	.7230	.4869	.4077	.3514	.4237		.7576		-.6434	-.6437	-.3586	-.3602	-.0985	
305.000			.3970	.2380	.1898	.1110		-.2515		-.2774					
320.000			.3600	.2086	.2118	.1909		-.5704		-.1030	-.2431	-.1123	-.1233	-.0231	.1001
340.000			.3451	.2100	.2349	.4186		-.5225		-.0392					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1880	.2888	.4509	.1268	-.3915	-.3335	-.3260			-.2636	-.2724				
40.000	.1466	.1854	.2136	-.2729	-.3605	-.3480	-.3246			-.2525	-.2394				
70.000	-.0204	-.1857	-.0971	.1894	-.0034	-.0958	-.1502								
90.000	.0094	-.1335	.0695	.1840	-.0504	-.1564	-.1738								
105.000			.1978	.1824	-.1386	-.2133	-.2047								
110.000								-.3006							
120.000	.0206	-.0018	.3088	.1833	-.1820	-.2367	-.2466	-.2770							
135.000			.3721	.3575	-.1355	-.1384	-.1782								
150.000	.0050	.1419	.3637	.3444	-.0362	-.0690	-.1580								
165.000	.0661		.3525		.2187	-.0010	-.2787								
180.000	.0741	.1749	.3573	.4292											
320.000	.1907	.3449	.4550	.2196	-.3167	-.2906	-.2807								

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1A81A - PRESSURE SOURCE DATA TABULATION

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ARC11-019 1A81 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB22)

ALPHA0 ( 1 ) = .053 BETA0 ( 4 ) = -.007

SECTION ( 1 ) ORBITER FUSELAGE				DEPENDENT VARIABLE CP											
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.3229	.7469	.2755	.2138	.2153	.7210		-.3968		-.0526	-.1034	-.1143	-.1072	-.0144	.1007
20.000			.2903	.2135	.1967	.4406		-.5559		-.0419					
40.000			.4201	.2276	.1701	.2318		-.4474		-.1647	-.1065	-.1285	-.1648	-.0388	.1479
55.000			.4894	.2742	.1775	.1470		-.1095		-.2695					
70.000			.5118	.2846	.1607	.1567		-.0140		-.1811	-.5852	-.2898	-.2396	-.1323	
90.000		.6710	.5337	.3110	.1681	.1860		.0529		-.1584	-.5490	-.4042	-.2463	-.1330	
120.000			.5513	.3747	.2458	.3143		.2897		-.1985	-.4610	-.7049	-.2251	-.1276	
140.000										-.2994					
150.000			.5303	.3980	.3173	.3936				-.5252	-.6667	-.4837	-.3240	-.1052	
151.000									.4066						
156.000								.7089							
162.000									.4614						
165.000										-.5407	-.5821	-.3804	-.3581	-.0968	
169.000								.7916							
174.000						.9229									
180.000	1.3229	.7133	.4963	.4088	.3493	.4283		.7692		-.6646	-.6450	-.3576	-.3625	-.0954	
305.000			.4582	.2783	.2165	.1458		-.2026		-.2327					
320.000			.3777	.2173	.2080	.2169		-.5071		-.0692	-.2448	-.0847	-.0915	-.0235	.1135
340.000			.3346	.2038	.2186	.4416		-.4997		-.0073					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1749	.2429	.3006	.0886	-.3621	-.3320	-.3154		-.2698	-.2722					
40.000	.1547	.2075	.2168	-.0342	-.4319	-.3343	-.3144		-.2631	-.2516					
70.000	-.0276	-.1815	-.0365	.1801	-.0239	-.1065	-.1556								
90.000	.0094	-.1191	.0837	.1619	-.0789	-.1564	-.1836								
105.000			.1773	.1504	-.1740	-.2164	-.2400								
110.000								-.2129							
120.000	.0391	.0337	.2594	.1784	-.1888	-.2610	-.2910	-.2920							
135.000			.3081	.3620	-.0853	-.1688	-.2147								
150.000	.0675	.1418	.3169	.4157	-.0173	-.1113	-.1954								
165.000	.0729		.3314		.1671	-.0498	-.2778								
180.000	.0739	.1459	.3419	.4916											
320.000	.1660	.2580	.3199	.0617	-.3316	-.3421	-.2960								

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## IABIA - PRESSURE SOURCE DATA TABULATION

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ARC11-019 IAB1 LVAP(ELHL SEALED) ORB. FUSELAGE

(RET822)

ALPHA0 ( 1 ) = .079 BETA0 ( 5 ) = 2.058

SECTION ( 1 ) ORBITER FUSELAGE				DEPENDENT VARIABLE CP											
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.3229	.7434	.2704	.2125	.2169	.8754		-.4744		-.0722	-.0870	-.1211	-.1165	-.0362	.1036
20.000			.2718	.1990	.1916	.3990		-.5113		-.0795					
40.000			.3554	.1960	.1492	.1923		-.5097		-.1770	-.1437	-.1356	-.1991	-.0164	.1383
55.000			.4143	.2206	.1304	.1070		-.1667		-.3059					
70.000			.4397	.2256	.1106	.1135		-.0605		-.2225	-.6235	-.3427	-.2683	-.1168	
90.000		.5771	.4699	.2505	.1149	.1383		.0087		-.2078	-.5914	-.4941	-.2549	-.1108	
120.000			.4969	.3299	.1985	.2698		.2401		-.2633	-.5171	-.7359	-.2422	-.1021	
140.000										-.4383					
150.000			.4949	.3753	.2933	.3660				-.5721	-.6367	-.4466	-.3703	-.0949	
151.000									.3553						
156.000								.6676							
162.000									.4228						
165.000										-.5417	-.6394	-.3703	-.3733	-.0962	
169.000								.7745							
174.000						.9104									
180.000	1.3229	.6992	.4887	.4045	.3436	.4156		.7688		-.6640	-.6404	-.3610	-.3496	-.1019	
305.000			.5370	.3336	.2637	.1961		-.1493		-.2082					
320.000			.4237	.2387	.2277	.2630		-.4532		-.1329	-.2988	-.0395	-.0499	.0251	.1471
340.000			.3575	.2108	.2297	.4945		-.6049		.0029					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1892	.2640	.3360	.1468	-.3045	-.3112	-.2919		-.2488	-.2400					
40.000	.1895	.2876	.3923	.1738	-.4660	-.2944	-.2936		-.2454	-.2451					
70.000	-.0137	-.1592	.0610	.1832	-.0376	-.1372	-.1891								
90.000	.0258	-.0878	.1249	.1744	-.0904	-.1823	-.2093								
105.000			.1987	.1859	-.1810	-.2348	-.2613								
110.000								-.2936							
120.000	.0601	.0741	.2694	.0859	-.2136	-.2970	-.3374	-.3105							
135.000			.3168	.3090	-.1631	-.2097	-.2555								
150.000	.0800	.1552	.3448	.3656	-.0736	-.1696	-.2481								
165.000	.0790		.3539		.1384	-.1055	-.2849								
180.000	.0776	.1687	.3596	.4302											
320.000	.1629	.2222	.2283	-.1715	-.3539	-.3374	-.3155								

ORIGINAL  
OF POB 4

ORIGINAL PAGE IS  
OF POOR QUALITY

ARC11-019 IAB1 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB22)

ALPHA0 (1) = .083 BETA0 (6) = 4.107

SECTION (1) ORBITER FUSELAGE		DEPENDENT VARIABLE CP													
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.2937	.7386	.2840	.2134	.2096	.8756		-.4963		-.1425	-.1123	-.1555	-.1160	-.0711	.0846
20.000			.2620	.1865	.1735	.3560		-.5246		-.1361					
40.000			.3039	.1716	.1341	.1484		-.5684		-.1937	-.1238	-.1870	-.1993	-.0139	.1193
55.000			.3375	.1622	.0930	.0665		-.2230		-.3870					
70.000			.3612	.1612	.0624	.0779		-.1064		-.2887	-.6745	-.4140	-.3013	-.0798	
90.000		.4722	.3948	.1878	.0587	.0952		-.0361		-.2739	-.6471	-.5844	-.2622	-.0875	
120.000			.4418	.2784	.1484	.2244		.1768		-.3290	-.5760	-.7778	-.2870	-.0996	
140.000										-.5247					
150.000			.4610	.3558	.2674	.3336				-.6065	-.6474	-.4201	-.4169	-.1219	
151.000									.2927						
156.000								.6225							
162.000									.3727						
165.000										-.5443	-.6731	-.3810	-.3791	-.1323	
169.000								.7421							
174.000							.8850								
180.000	1.2937	.6803	.4833	.3955	.3343	.4040		.7495		-.6589	-.5896	-.3910	-.3269	-.1542	
305.000			.6085	.3945	.3193	.2275		-.0813		-.1538					
320.000			.4739	.2705	.2578	.2833		-.4031		-.0663	-.3081	.0008	-.1237	.0793	.1729
340.000			.3854	.2200	.2330	.5104		-.5733		.0105					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1840	.2800	.3795	.1796	-.2846	-.3079	-.3010			-.2553	-.2492				
40.000	.2059	.3366	.4819	.2800	-.4606	-.2736	-.2919			-.2549	-.2431				
70.000	.0126	-.1252	.0699	.1843	-.0548	-.1598	-.2195								
90.000	.0555	-.0433	.1278	.1758	-.1080	-.2241	-.2444								
105.000			.2066	.1755	-.1995	-.2595	-.2876								
110.000								-.3231							
120.000	.0831	.1012	.2464	.0300	-.2696	-.3486	-.3945	-.3143							
135.000			.3070	.3220	-.1941	-.2656	-.3055								
150.000	.0983	.1669	.3285	.3809	-.0955	-.2262	-.2964								
165.000	.0915		.3343		.0803	-.1500	-.2954								
180.000	.0743	.1632	.3531	.4196											
320.000	.1569	.2302	.2301	-.2728	-.3292	-.3604	-.3372								

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## IAB1A - PRESSURE SOURCE DATA TABULATION

PAGE 393

ARC11-019 IAB1 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB22)

ALPHA0(1) = .090 BETA0(7) = 6.163

SECTION : 1) ORBITER FUSELAGE				DEPENDENT VARIABLE CP											
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.2539	.7205	.3779	.2043	.1934	.8242		-.4832		-.1644	-.2837	-.1738	-.1382	-.1625	.0400
20.000			.2348	.1580	.1529	.2900		-.5293		-.2235					
40.000			.2407	.1300	.1073	.0856		-.6295		-.2027	-.1798	-.2508	-.2436	-.0258	.1018
55.000			.2589	.0987	.0529	.0304		-.2725		-.4491					
70.000			.2813	.0973	.0161	.0370		-.1498		-.3420	-.7264	-.4746	-.3355	-.0059	
90.000		.3486	.3147	.1176	.0063	.0551		-.0808		-.3289	-.6990	-.6473	-.2959	-.0429	
120.000			.3691	.2134	.0880	.1775		.1136		-.3914	-.6295	-.8242	-.3598	-.0839	
140.000										-.5918					
150.000			.4021	.3122	.2181	.2922				-.6372	-.6915	-.4355	-.4525	-.1658	
151.000									.2199						
156.000								.5622							
162.000									.3189						
165.000										-.5681	-.6919	-.4077	-.3934	-.2091	
169.000								.7073							
174.000						.8185									
180.000	1.2539	.6304	.4513	.3660	.3040	.3798		.7157		-.6731	-.5627	-.4607	-.3453	-.2672	
305.000			.6806	.4627	.3759	.2666		-.0315		-.0271					
320.000			.5187	.2998	.2733	.2935		-.3534		-.0426	-.2939	.0447	-.3574	.1045	.1772
340.000			.3979	.2238	.2253	.5149		-.5766		.0515					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1390	.2509	.3735	.1210	-.2787	-.3189	-.3163		-.2606	-.2549					
40.000	.2147	.3656	.5265	.3601	-.4460	-.2804	-.3092		-.2677	-.2586					
70.000	.0068	-.1125	.0566	.1849	-.0703	-.1824	-.2433								
90.000	.0458	-.0368	.1151	.1924	-.1269	-.2483	-.2703								
105.000			.1917	.1944	-.2143	-.2787	-.3082								
110.000								-.3082							
120.000	.0607	.0934	.2228	.0390	-.3033	-.3903	-.4402	-.3075							
135.000			.2509	.2858	-.2328	-.3200	-.3546								
150.000	.0698	.1468	.2664	.3988	-.1645	-.3078	-.3603								
165.000	.0617		.2911		.0401	-.2210	-.3024								
180.000	.0495	.1222	.3233	.3870											
320.000	.1470	.2323	.2208	-.2949	-.3246	-.3798	-.3752								





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## 1A81A - PRESSURE SOURCE DATA TABULATION

PAGE 395

ARC11-019 1A81 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB23)

BETA0 ( 1 ) = .011 ALPHA0( 2 ) = -4.160

SECTION ( 1 ) ORBITER FUSELAGE				DEPENDENT VARIABLE CP											
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.4501	.9959	.4427	.1756	.2854	.9107		-.1839		-.3705	-.0440	.1004	.0071	-.0486	-.0198
20.000			.4704	.2068	.2675	.6638		-.2983		-.2608					
40.000			.5878	.2762	.2452	.4464		-.1760		-.3603	-.1107	.0048	-.0418	-.2159	-.1142
55.000			.6490	.3836	.2984	.2833		.0893		-.0567					
70.000			.6676	.4173	.3071	.2664		.1802		.0355	-.3026	-.2883	-.1159	-.0621	
90.000		.8029	.6777	.4541	.3158	.2805		.2469		.0665	-.2700	-.3005	-.1633	-.0624	
120.000			.6871	.5207	.3795	.4167		.4863		.0498	-.2017	-.4136	-.2377	-.0689	
140.000										-.0641					
150.000			.6676	.5414	.4420	.5014				-.1958	-.3358	-.2177	-.1614	-.1077	
151.000									.6228						
156.000								.8941							
162.000									.6836						
165.000										-.1942	-.3073	-.1691	-.1531	-.1365	
169.000								.9771							
174.000						1.0694									
180.000	1.4501	.8369	.6351	.5523	.4717	.5398		.9620		-.3231	-.3247	-.1242	-.1473	-.1433	
305.000			.6105	.3619	.3361	.3083		.0201		-.0756					
320.000			.5535	.2279	.3133	.4442		-.2319		-.3070	-.0502	-.1049	-.0636	-.0210	-.0436
340.000			.5136	.1687	.2920	.6804		-.3481		-.2225					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.0455	.2108	.3644	.2567	-.2451	-.2643	-.2465		-.2089	-.2006					
40.000	.0158	.1557	.2344	-.0696	-.2729	-.2995	-.3249		-.2015	-.2077					
70.000	-.0449	-.1232	-.0721	.1121	.0257	-.0287	-.0507								
90.000	-.0220	-.0845	.0703	.0957	-.0225	-.0463	-.0714								
105.000			.1740	.0957	-.1038	-.1051	-.1238								
110.000								-.2255							
120.000	-.0362	-.0309	.2140	.0597	-.0290	-.1728	-.2391	-.2180							
135.000			.2920	.2966	.0257	-.0336	-.0708								
150.000	-.0452	-.0191	.3046	.3503	.1219	.0513	-.0229								
165.000	-.0452		.3028	.3630	.1384	-.2146									
180.000	-.0471	-.0241	.3087	.4638											
320.000	.0053	.2260	.3799	.0897	-.2794	-.2388	-.2862								

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## 1A81A - PRESSURE SOURCE DATA TABULATION

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ARC11-019 1A81 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB23)

BETA0 ( 1 ) = -.007 ALPHA0( 3 ) = -2.069

SECTION ( 1 ) ORBITER FUSELAGE		DEPENDENT VARIABLE CP													
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1860	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.4795	1.0101	.4396	.1436	.2157	.9013		-.2029		-.3664	-.0709	.0556	.0320	-.0301	.0004
20.000			.4692	.1773	.2150	.6433		-.3295		-.2736					
40.000			.5854	.2589	.1996	.4184		-.1990		-.3953	-.1386	-.0246	-.0439	-.2091	-.1271
55.000			.6390	.3662	.2831	.2438		.0545		-.0841					
70.000			.6500	.3974	.2914	.2163		.1522		.0271	-.3194	-.3104	-.1279	-.0747	
90.000		.7955	.6642	.4352	.2985	.2260		.2311		.0575	-.2809	-.3115	-.1906	-.0768	
120.000			.6504	.4812	.3412	.3340		.4716		.0382	-.2218	-.4244	-.2629	-.0845	
140.000										-.0721					
150.000			.6144	.4942	.3940	.4159				-.2172	-.3666	-.2521	-.1903	-.1290	
151.000									.6010						
156.000								.8673							
162.000									.6587						
165.000										-.2203	-.3408	-.2082	-.1848	-.1594	
169.000								.9484							
174.000						1.0446									
180.000	1.4795	.7583	.5781	.5016	.4171	.4477		.9331		-.3554	-.3532	-.1599	-.1792	-.1686	
305.000			.6030	.3480	.3112	.2719		-.0122		-.1010					
320.000			.5542	.2126	.2491	.4212		-.2435		-.3520	-.0848	-.1426	-.0507	-.0135	-.0324
340.000			.5140	.1377	.2238	.6651		-.3824		-.2374					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.0862	.2327	.3687	.2569	-.2432	-.2624	-.2403		-.2015	-.1956					
40.000	.0518	.1856	.2492	-.0209	-.2896	-.3088	-.3453		-.1934	-.2009					
70.000	-.0686	-.1488	-.1376	.0754	-.0048	-.0580	-.0839								
90.000	-.0420	-.1033	.0439	.0584	-.0454	-.0685	-.0975								
105.000			.1467	.0903	-.1359	-.1205	-.1455								
110.000								-.2520							
120.000	-.0544	-.0410	.1968	.0607	-.0135	-.1737	-.2421	-.2236							
135.000			.2309	.2311	.0180	-.0486	-.0864								
150.000	-.0572	-.0305	.2671	.2997	.0864	.0304	-.0421								
165.000	-.0578		.2733		.3210	.1112	-.2112								
180.000	-.0599	-.0332	.2792	.4132											
320.000	.0509	.2609	.3969	.1253	-.2766	-.2493	-.2948								

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## IABIA - PRESSURE SOURCE DATA TABULATION

PAGE 397

ARC11-019 IAB1 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB23)

BETA0 (1) = -.022 ALPHA0(4) = .024

SECTION (1) ORBITER FUSELAGE	DEPENDENT VARIABLE CP														
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.4690	1.0223	.4338	.1144	.1682	.8949		-.1998		-.3901	-.0812	-.0983	.0523	-.0074	-.0011
20.000			.4669	.1496	.1651	.6234		-.3219		-.3146					
40.000			.5896	.2396	.1462	.3925		-.2163		-.4202	-.1511	-.1011	-.0289	-.2144	-.1215
55.000			.6390	.3530	.2594	.2148		.0112		-.1052					
70.000			.6409	.3805	.2671	.1720		.1073		.0106	-.3291	-.2974	-.1575	-.0905	
90.000		.7825	.6469	.4145	.2733	.1823		.2098		.0480	-.2956	-.3199	-.2556	-.1003	
120.000			.6173	.4470	.3050	.2726		.4582		.0245	-.2434	-.4344	-.2766	-.1068	
140.000										-.0796					
150.000			.5647	.4439	.3457	.3325				-.2375	-.3956	-.2858	-.2193	-.1487	
151.000									.5789						
156.000								.8426							
162.000									.6323						
165.000										-.2480	-.3732	-.2446	-.2178	-.1759	
169.000								.9194							
174.000						1.0358									
180.000	1.4690	.6989	.5212	.4519	.3713	.3591		.9003		-.3869	-.3807	-.1944	-.2129	-.1784	
305.000			.5908	.3379	.2954	.2497		-.0468		-.1319					
320.000			.5515	.2040	.2173	.4013		-.2559		-.3807	-.0927	-.1941	-.0326	.0008	-.0045
340.000			.5067	.1159	.1876	.6528		-.3990		-.2530					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1165	.2625	.3841	.2598	-.2368	-.2514	-.2388			-.2031	-.2013				
40.000	.0942	.2170	.2777	.0314	-.2993	-.3354	-.3819			-.1883	-.2006				
70.000	-.0812	-.1694	-.1823	.0095	-.0272	-.0813	-.1051								
90.000	-.0497	-.1193	-.0502	.0550	-.0786	-.1024	-.1289								
105.000			.1075	.0797	-.1701	-.1475	-.1713								
110.000								-.2596							
120.000	-.0676	-.0456	.1886	.1378	-.0313	-.1800	-.2487	-.2298							
135.000			.1809	.2371	.0503	-.0633	-.1091								
150.000	-.0651	-.0208	.1988	.2704	.0766	.0145	-.0642								
165.000	-.0645		.2304		.2760	.0851	-.2125								
180.000	-.0661	-.0261	.2458	.3780											
320.000	.0957	.2922	.4144	.1514	-.2878	-.2642	-.3187								

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## ARC11-019 IAB1 LVAP(ELML SEALED) ORB. FUSELAGE

(RETB23)

BETAO ( 1 ) = -.018 ALPHA0( 5 ) = 2.134

SECTION ( 1 ) ORBITER FUSELAGE				DEPENDENT VARIABLE CP											
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.4490	1.0353	.4316	.0969	.1556	.8996		-.2041		-.3864	-.0757	-.1858	.0590	.0052	.0400
20.000			.4656	.1290	.1432	.6079		-.3336		-.3176					
40.000			.5898	.2295	.1306	.3771		-.2261		-.4211	-.1768	-.1421	-.0065	-.2058	-.0990
55.000			.6348	.3482	.2487	.1885		-.0096		-.1008					
70.000			.6332	.3717	.2545	.1466		.0622		.0085	-.3140	-.2808	-.1925	-.1070	
90.000		.7672	.6291	.3971	.2573	.1535		.1627		.0497	-.2939	-.3156	-.2937	-.1030	
120.000			.5872	.4131	.2744	.2328		.4479		.0153	-.2554	-.4355	-.2913	-.1258	
140.000										-.0794					
150.000			.5198	.3983	.3103	.2747				-.2566	-.4217	-.3149	-.2374	-.1758	
151.000									.5627						
156.000								.8302							
162.000									.6097						
165.000										-.2715	-.3984	-.2746	-.2399	-.1900	
169.000								.8971							
174.000						1.0171									
180.000	1.4490	.6528	.4713	.4088	.3340	.2903		.8744		-.4127	-.4056	-.2264	-.2377	-.1919	
305.000			.5929	.3337	.2903	.2350		-.0707		-.1384					
320.000			.5594	.2020	.2050	.3868		-.2703		-.3690	-.1098	-.2408	-.0240	.0407	.0246
340.000			.5071	.1043	.1841	.6404		-.4211		-.2454					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1624	.2974	.4102	.2818	-.2235	-.2467	-.2341			-.1968	-.1953				
40.000	.1326	.2562	.3159	.0634	-.3023	-.3239	-.3785			-.1838	-.1956				
70.000	-.0823	-.1965	-.2104	-.0421	-.0352	-.0964	-.1220								
90.000	-.0420	-.1467	-.1405	.0436	-.0973	-.1214	-.1601								
105.000			.0130	.1064	-.1737	-.2083	-.1944								
110.000										-.2691					
120.000	-.0810	-.0641	.1473	.1382	-.0769	-.1972	-.2536			-.2291					
135.000			.1801	.2165	.0019	-.0879	-.1263								
150.000	-.0690	.0387	.1779	.2446	.0900	-.0073	-.0885								
165.000	-.0656		.1952		.2118	.0670	-.2164								
180.000	-.0646	.0176	.2091	.3250											
320.000	.1410	.3230	.4328	.1692	-.2872	-.2657	-.3258								

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ARC11-019 IAB1 LVAP(ELHL SEALED) ORB. FUSELAGE

(RET823)

BETA0 (1) = -.008 ALPHA0 (6) = 4.218

SECTION (1) ORBITER FUSELAGE		DEPENDENT VARIABLE CP													
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.4336	1.0490	.4259	.0784	.1432	.8788		-.2194		-.3098	-.0760	-.2277	.0745	.0026	.1025
20.000			.4615	.1099	.1364	.5924		-.3622		-.2678					
40.000			.5907	.2184	.1262	.3578		-.2245		-.4006	-.2283	-.1460	-.0075	-.0663	-.0875
55.000			.6310	.3439	.2480	.1676		-.0117		-.1098					
70.000			.6209	.3603	.2477	.1292		.0552		.0036	-.3086	-.2809	-.2002	-.1197	
90.000		.7487	.6102	.3817	.2434	.1332		.1110		.0662	-.2862	-.3201	-.3099	-.0982	
120.000			.5579	.3817	.2432	.2013		.4447		.0132	-.2570	-.4279	-.3152	-.1372	
140.000										-.0850					
150.000			.4788	.3541	.2723	.2285				-.2784	-.4450	-.3367	-.2463	-.1786	
151.000									.5551						
156.000								.8281							
162.000									.5940						
165.000										-.2995	-.4227	-.2973	-.2491	-.2052	
169.000								.8876							
174.000							1.0024								
180.000	1.4336	.6195	.4246	.3643	.2935	.2357		.8529		-.4419	-.4292	-.2506	-.2497	-.2089	
305.000			.5945	.3346	.2804	.2197		-.0589		-.1372					
320.000			.5668	.2072	.1989	.3721		-.2509		-.3247	-.1196	-.2426	.0066	.0805	.0836
340.000			.5029	.0963	.1758	.6264		-.4395		-.2283					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.2025	.3287	.4350	.2957	-.1975	-.2278	-.2139		-.1789	-.1733					
40.000	.1737	.2826	.3511	.0679	-.2863	-.2482	-.2852		-.1767	-.1826					
70.000	-.0928	-.2080	-.2351	-.0677	-.0663	-.1136	-.1458								
90.000	-.0483	-.1616	-.1757	.0196	-.1226	-.1415	-.1833								
105.000			-.0039	.0815	-.1817	-.2362	-.2173								
110.000								-.2784							
120.000	-.0956	-.0816	.1611	.1011	-.0731	-.2198	-.2629	-.2474							
135.000			.1793	.2091	-.0579	-.1272	-.1474								
150.000	-.0631	.0518	.1725	.2159	.0339	-.0315	-.1071								
165.000	-.0576		.1892		.1859	.0392	-.2233								
180.000	-.0548	.0444	.1966	.2927											
320.000	.1795	.3366	.4390	.1615	-.2547	-.2164	-.2576								

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ARC11-019 IAB1 LVAP(ELHL SEALED) ORB. FUSELAGE

(RET23)

BETA0 ( 1 ) = -.002 ALPHA0( 7 ) = . 5.273

SECTION ( 1 ) ORBITER FUSELAGE				DEPENDENT VARIABLE CP											
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.4284	1.0519	.4079	.0608	.1441	.8634		-.2254		-.2524	-.0580	-.2173	.0857	.0293	.1161
20.000			.4451	.0990	.1277	.5799		-.3876		-.2117					
40.000			.5810	.2068	.1290	.3421		-.2120		-.3909	-.2442	-.1321	.0154	.0308	-.0466
55.000			.6256	.3407	.2527	.1582		-.0003		-.1143					
70.000			.6115	.3598	.2466	.1239		.0494		-.0092	-.2985	-.2783	-.1865	-.1242	
90.000		.7414	.5995	.3734	.2370	.1282		.0966		.0834	-.2765	-.3181	-.3022	-.1021	
120.000			.5432	.3682	.2291	.1897		.4422		.0256	-.2511	-.4240	-.3267	-.1414	
140.000										-.0710					
150.000			.4614	.3351	.2575	.2110				-.2774	-.4478	-.3424	-.2525	-.1707	
151.000									.5556						
156.000								.8369							
162.000									.5939						
165.000										-.3019	-.4271	-.3037	-.2543	-.2007	
169.000								.8926							
174.000							.9939								
180.000	1.4284	.6061	.4007	.3456	.2768	.2188		.8543		-.4453	-.4302	-.2571	-.2534	-.2078	
305.000			.5951	.3348	.2768	.2141		-.0557		-.1324					
320.000			.5586	.2021	.1922	.3614		-.2295		-.3075	-.1064	-.2230	.0329	.0905	.1332
340.000			.4962	.0818	.1707	.6171		-.4473		-.2136					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.2158	.3432	.4510	.3063	-.1982	-.2236	-.2088		-.1818	-.1766					
40.000	.1929	.2906	.3663	.0637	-.2854	-.2297	-.2592		-.1738	-.1778					
70.000	-.0964	-.2087	-.2426	-.0828	-.0820	-.1228	-.1541								
90.000	-.0559	-.1620	-.1876	.0096	-.1345	-.1509	-.1865								
105.000			-.0077	.0745	-.1837	-.2446	-.2246								
110.000								-.2824							
120.000	-.1010	-.0810	.1589	.0902	-.0671	-.2243	-.2700	-.2595							
135.000			.1771	.1996	-.0545	-.1377	-.1544								
150.000	-.0605	.0519	.1703	.2132	.0160	-.0384	-.1108								
165.000	-.0537		.1827		.1863	.0395	-.2286								
180.000	-.0528	.0479	.1880	.3146											
320.000	.1910	.3462	.4439	.1629	-.2279	-.2103	-.2388								





ARC11-019 IAB1 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB24)

BETA0 ( 1 ) = .001 ALPHA0 ( 2 ) = -4.131

SECTION ( 1 ) ORBITER FUSELAGE		DEPENDENT VARIABLE CP													
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.3759	.8564	.3978	.3229	.3456	.8529		-.2713		-.1907	-.0295	-.0340	-.0773	-.1218	-.0120
20.000			.4195	.3219	.3288	.5863		-.3113		-.2197					
40.000			.5270	.3340	.2910	.3744		-.2955		-.3089	-.1286	-.0531	-.1688	-.2827	-.0699
55.000			.5881	.3826	.2891	.2620		.0063		-.1387					
70.000			.6137	.3956	.2764	.2599		.1028		-.0473	-.4162	-.2757	-.1887	-.0975	
90.000		.7752	.6418	.4238	.2859	.2849		.1696		-.0268	-.3792	-.3957	-.1859	-.1104	
120.000			.6674	.4978	.3671	.4227		.4023		-.0598	-.3012	-.5267	-.2732	-.1246	
140.000										-.1812					
150.000			.6561	.5296	.4475	.5114				-.3274	-.4448	-.3014	-.2164	-.1437	
151.000									.5355						
156.000								.8173							
162.000									.5961						
165.000										-.3229	-.3977	-.2231	-.2180	-.1482	
169.000								.9040							
174.000						1.0224									
180.000	1.3759	.8357	.6257	.5427	.4789	.5499		.8895		-.4344	-.4340	-.1941	-.2158	-.1526	
305.000			.5545	.3827	.3296	.2663		-.0779		-.1493					
320.000			.4911	.3250	.3302	.3720		-.3547		-.2293	-.1368	-.0555	-.1842	-.0982	-.0110
340.000			.4581	.3129	.3523	.5963		-.3540		-.0645					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.0965	.2170	.3247	.1749	-.3128	-.2777	-.2698			-.2424	-.2434				
40.000	.0771	.1600	.2033	-.1206	-.3248	-.2768	-.2688			-.2300	-.2199				
70.000	-.0518	-.1055	.0262	.1635	.0347	-.0333	-.0719								
90.000	-.0365	-.0556	.1333	.1555	-.0288	-.0679	-.0732								
105.000			.2281	.1012	-.0914	-.1298	-.1400								
110.000										-.2617					
120.000	-.0530	-.0062	.2627	.0500	-.0936	-.1928	-.2248	-.2353							
135.000			.3535	.3361	-.0199	-.0725	-.1046								
150.000	-.0734	-.0342	.3729	.3901	.0922	.0070	-.0725								
165.000	-.0740		.3748		.3332	.0869	-.2446								
180.000	-.0743	-.0386	.3748	.5054											
320.000	.0878	.2099	.3284	.0401	-.2584	-.2621	-.2859								

DATE 20 OCT 75

## 1A81A - PRESSURE SOURCE DATA TABULATION

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ARC11-019 1A81 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB24)

BETA0 ( 1 ) = -.012 ALPHAG( 3 ) = -2.038

SECTION ( 1 ) ORBITER FUSELAGE				DEPENDENT VARIABLE CP											
X/LB	.0000	.0090	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.4035	.8693	.3662	.2685	.2996	.8375		-.2954		-.2300	-.0502	-.0311	-.0150	-.1131	.0141
20.000			.3888	.2720	.2847	.5721		-.3518		-.2959					
40.000			.5094	.2942	.2459	.3515		-.3202		-.3805	-.1548	-.0320	-.1668	-.2163	.0065
55.000			.5770	.3513	.2609	.2162		-.0221		-.1600					
70.000			.5987	.3665	.2469	.2149		.0776		-.0773	-.4206	-.2861	-.1996	-.1153	
90.000		.7558	.6177	.3967	.2517	.2393		.1463		-.0451	-.3871	-.4050	-.2059	-.1207	
120.000			.6245	.4557	.3195	.3746		.3857		-.0732	-.3281	-.5341	-.2757	-.1406	
140.000										-.1898					
150.000			.6012	.4716	.3817	.4564				-.3508	-.4869	-.3444	-.2479	-.1508	
151.000									.5141						
156.000								.7983							
162.000									.5719						
165.000										-.3498	-.4387	-.2719	-.2548	-.1549	
169.000								.8816							
174.000							.9972								
180.000	1.4035	.7704	.5647	.4830	.4131	.4926		.8636		-.4853	-.4722	-.2384	-.2514	-.1591	
305.000			.5379	.3475	.3012	.2239		-.1013		-.1920					
320.000			.4725	.2793	.2906	.3400		-.3745		-.2896	-.1069	-.0627	-.1605	-.0796	.0163
340.000			.4341	.2593	.3044	.5785		-.3984		-.1758					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1240	.2375	.3354	.1784	-.2771	-.2790	-.2598			-.2223	-.2150				
40.000	.1062	.1879	.2213	-.0720	-.3028	-.2983	-.2935			-.2093	-.2147				
70.000	-.0603	-.1416	-.0704	.1390	-.0004	-.0667	-.0961								
90.000	-.0383	-.0765	.0875	.1025	-.0413	-.0930	-.1133								
105.000			.1959	.1066	-.1143	-.1521	-.1711								
110.000								-.2760							
120.000	-.0491	.0008	.2499	.0326	-.0787	-.1978	-.2414	-.2551							
135.000			.2941	.2795	-.0302	-.0901	-.1279								
150.000	-.0730	.0059	.3280	.3513	.0609	-.0141	-.0977								
165.000	-.0749		.3385		.3018	.0622	-.2363								
180.000	-.0761	.0053	.3449	.4677											
320.000	.1199	.2419	.3500	.0717	-.3060	-.2617	-.2675								

## ARC11-019 1A81 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB24)

BETA0 ( 1 ) = -.024 ALPHA0 ( 4 ) = .059

SECTION ( 1 ) ORBITER FUSELAGE		DEPENDENT VARIABLE CP													
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.4001	.8765	.3369	.2013	.2561	.8095		-.3124		-.2640	-.1024	-.0492	-.0297	-.0757	.0432
20.000			.3647	.2007	.2374	.5520		-.3984		-.3746					
40.000			.4922	.2359	.2066	.3234		-.3341		-.4499	-.2149	.0018	-.1676	-.1388	.0518
55.000			.5614	.3180	.2377	.1765		-.0362		-.1648					
70.000			.5801	.3402	.2256	.1584		.0567		-.0608	-.4296	-.3175	-.2039	-.1237	
90.000		.7367	.5999	.3678	.2221	.1812		.1340		-.0403	-.3993	-.4157	-.2238	-.1180	
120.000			.5953	.4173	.2703	.3169		.3810		-.0836	-.3366	-.5458	-.3136	-.1508	
140.000										-.1958					
150.000			.5536	.4189	.3218	.3947				-.3740	-.5198	-.3772	-.2748	-.1648	
151.000									.5025						
156.000								.7892							
162.000									.5532						
165.000										-.3762	-.4729	-.3172	-.2837	-.1689	
169.000								.8632							
174.000						.9922									
180.000	1.4001	.7237	.5087	.4282	.3500	.4350		.8409		-.5253	-.5032	-.2771	-.2818	-.1743	
305.000			.5197	.3217	.2783	.1943		-.1239		-.1853					
320.000			.4573	.2345	.2607	.3274		-.3847		-.3421	-.1021	-.0410	-.1164	-.0449	.0490
340.000			.4138	.2028	.2648	.5675		-.4678		-.3223					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1530	.2652	.3560	.1891	-.2589	-.2677	-.2562		-.2162	-.2111					
40.000	.1314	.2165	.2528	-.0141	-.3065	-.2963	-.3042		-.2000	-.2064					
70.000	-.0678	-.1654	-.1872	.1104	-.0171	-.0822	-.1239								
90.000	-.0376	-.0910	-.0007	.0790	-.0531	-.1171	-.1421								
105.000			.1349	.0920	-.1349	-.1780	-.2009								
110.000								-.2746							
120.000	-.0395	-.0071	.2229	.1463	-.0980	-.2114	-.2495	-.2545							
135.000			.2368	.3002	.0108	-.1118	-.1522								
150.000	-.0617	.0717	.2530	.3230	.0584	-.0355	-.1207								
165.000	-.0646		.2838		.2610	.0408	-.2317								
180.000	-.0646	.0549	.2974	.4163											
320.000	.1545	.2750	.3800	.1079	-.3141	-.2673	-.2676								

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## 1A81A - PRESSURE SOURCE DATA TABULATION

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ARC11-019 1A81 LVAP (ELHL SEALED) ORB. FUSELAGE

(RETB24)

BETA0 (1) = -.019 ALPHA0 (5) = 2.162

SECTION (1) ORBITER FUSELAGE		DEPENDENT VARIABLE CP													
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.4015	.8776	.2916	.1203	.2181	.7458		-.3374		-.2186	-.1298	-.0226	-.0341	-.0465	.0805
20.000			.3201	.1231	.1930	.5171		-.4880		-.3375					
40.000			.4676	.1807	.1723	.2864		-.3296		-.4621	-.2785	-.0271	-.1590	-.0123	.1133
55.000			.5447	.2898	.2263	.1302		-.0395		-.1606					
70.000			.5599	.3130	.2111	.1056		.0606		-.0546	-.4314	-.3530	-.1979	-.1226	
90.000		.7103	.5748	.3407	.2031	.1204		.1363		-.0268	-.4024	-.4316	-.2482	-.1248	
120.000			.5622	.3789	.2325	.2332		.3851		-.0791	-.3584	-.5552	-.3482	-.1513	
140.000										-.1949					
150.000			.5103	.3700	.2720	.3179			.4981	-.3956	-.5468	-.4116	-.2989	-.1658	
151.000								.7913							
156.000									.5482						
162.000										-.4036	-.5063	-.3528	-.3052	-.1764	
165.000								.8640							
169.000							.9857								
174.000															
180.000	1.4015	.6821	.4611	.3824	.2976	.3502		.8349		-.5644	-.5302	-.3067	-.3077	-.1783	
305.000			.5091	.2858	.2639	.1553		-.1335		-.1751					
320.000			.4298	.1542	.2325	.2945		-.3779		-.3857	-.1180	-.0228	-.0405	.0054	.0885
340.000			.3690	.1272	.2331	.5352		-.5442		-.2893					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1808	.2971	.3868	.2160	-.2425	-.2646	-.2521		-.2095	-.2031					
40.000	.1614	.2468	.2881	.0166	-.3229	-.2871	-.3012		-.2012	-.2041					
70.000	-.0856	-.1944	-.2463	.0506	-.0426	-.1071	-.1565								
90.000	-.0446	-.1222	-.1034	.0576	-.0839	-.1468	-.1807								
105.000			.0609	.1053	-.1812	-.2173	-.2416								
110.000								-.2787							
120.000	-.0363	-.0178	.1726	.1392	-.1394	-.2661	-.2593	-.2605							
135.000			.2071	.2622	-.0756	-.1495	-.1892								
150.000	-.0443	.1175	.2141	.2765	.0603	-.0552	-.1478								
165.000	-.0468		.2399		.2115	.0178	-.2268								
180.000	-.0484	.1038	.2532	.3677											
320.000	.1822	.3063	.4085	.1297	-.3189	-.2623	-.2711								

ORIGINAL PAGE IS  
OF POOR QUALITY

ARC11-019 IAB1 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB24)

BETA0 (1) = -.013 ALPHA0(6) = 4.248

SECTION (1) ORBITER FUSELAGE		DEPENDENT VARIABLE CP													
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.3916	.8619	.2223	.1048	.2022	.7023		-.2938		-.0954	-.1765	.0273	.0224	.0155	.1191
20.000			.2712	.1060	.1736	.4938		-.5267		-.2792					
40.000			.4516	.1657	.1698	.2385		-.3091		-.4274	-.2319	-.0488	-.0429	-.0041	.1366
55.000			.5340	.2894	.2269	.1219		-.0572		-.1622					
70.000			.5482	.3085	.2022	.0819		.0411		-.0566	-.4322	-.3730	-.1637	-.1425	
90.000		.6882	.5573	.3285	.1866	.0912		.1455		-.0225	-.3994	-.4365	-.2353	-.1362	
120.000			.5321	.3510	.2081	.1751		.3914		-.0679	-.3641	-.5563	-.3649	-.1712	
140.000										-.1730					
150.000			.4703	.3351	.2401	.2343				-.3956	-.5695	-.4368	-.3220	-.1572	
151.000									.4967						
156.000								.7877							
162.000									.5425						
165.000										-.4256	-.5389	-.3794	-.3274	-.1483	
169.000								.8590							
174.000							.9720								
180.000	1.3916	.6371	.4170	.3412	.2625	.2590		.8306		-.5822	-.5539	-.3296	-.3274	-.1467	
305.000			.4926	.2675	.2670	.1415		-.1464		-.1699					
320.000			.3840	.1165	.2254	.2542		-.3561		-.3873	-.1587	-.0072	.0360	.0216	.1213
340.000			.3037	.0975	.2164	.4900		-.5595		-.0858					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.2175	.3303	.4341	.2419	-.2163	-.2398	-.2295		-.1770	-.1789					
40.000	.1921	.2744	.3329	.0121	-.2859	-.2481	-.2568		-.1792	-.1881					
70.000	-.0851	-.2214	-.2738	-.0101	-.0684	-.1297	-.1615								
90.000	-.0451	-.1493	-.1503	.0239	-.0986	-.1640	-.1958								
105.000			.0708	.0826	-.2170	-.2316	-.2607								
110.000								-.2769							
120.000	-.0356	-.0501	.2082	.0935	-.1497	-.2880	-.2689	-.2680							
135.000			.2396	.2608	-.1138	-.1786	-.2098								
150.000	-.0251	.0953	.2266	.2786	-.0141	-.0855	-.1662								
165.000	-.0260		.2355		.1944	-.0104	-.2289								
180.000	-.0270	.0962	.2479	.3795											
320.000	.2080	.3370	.4265	.1386	-.2684	-.2371	-.2298								

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## 1A81A - PRESSURE SOURCE DATA TABULATION

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ARC11-019 1A81 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB24)

BETA0 (1) = .001 ALPHA0(7) = 6.352

SECTION (1) ORBITER FUSELAGE		DEPENDENT VARIABLE CP													
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.3780	.8767	.1999	.0752	.2007	.6905		-.3010		-.0294	-.1658	.0380	.0508	.0365	.1460
20.000			.2472	.0873	.1575	.4584		-.4997		-.2052					
40.000			.4381	.1530	.1533	.2089		-.3097		-.4088	-.0165	-.0385	.0138	.0207	.1540
55.000			.5249	.2849	.2312	.1180		-.0710		-.1720					
70.000			.5353	.2992	.1997	.0875		.0060		-.0600	-.4288	-.3335	-.1621	-.1773	
90.000		.6678	.5378	.3147	.1749	.0811		.1061		-.0155	-.4001	-.4382	-.2178	-.1627	
120.000			.4973	.3204	.1745	.1383		.3902		-.0640	-.3695	-.5663	-.3288	-.2092	
140.000										-.1584					
150.000			.4274	.2944	.2028	.1713				-.3975	-.5962	-.4702	-.3443	-.1518	
151.000									.4921						
156.000								.7772							
162.000									.5325						
165.000										-.4444	-.5646	-.4129	-.3506	-.1272	
169.000								.8479							
174.000							.9532								
180.000	1.3780	.5851	.3746	.3004	.2227	.1845		.8173		-.5990	-.5754	-.3613	-.3541	-.1161	
305.000			.4918	.2633	.2638	.1562		-.1443		-.1944					
320.000			.3995	.1022	.2211	.2510		-.3425		-.3688	-.1374	.0236	.0444	.0450	.1428
340.000			.3026	.0669	.2137	.4953		-.5859		-.0602					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.2320	.3368	.4444	.2522	-.2543	-.2447	-.2308		-.1860	-.1908					
40.000	.2075	.2801	.3419	-.0065	-.3102	-.2352	-.2267		-.1730	-.1812					
70.000	-.0995	-.2495	-.3084	-.0701	-.1043	-.1592	-.1754								
90.000	-.0581	-.1817	-.2079	-.0087	-.1456	-.1824	-.2270								
105.000			.0467	.0588	-.2540	-.2358	-.2834								
110.000								-.2748							
120.000	-.0610	-.0943	.1892	.0493	-.1456	-.3044	-.3152	-.2713							
135.000			.2048	.2644	-.1284	-.2044	-.2327								
150.000	-.0148	.0218	.2207	.3267	-.0556	-.1168	-.1901								
165.000	-.0148		.2350		.1726	-.0416	-.2407								
180.000	-.0161	.0553	.2430	.4125											
320.000	.2202	.3416	.4043	.0906	-.2498	-.2273	-.2219								

ARC11-019 IAB1 LVAP(ELHL SEALED) ORB. FUSELAGE

(RET25) ( 03 OCT 74 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 976.0000 IN. XT  
 LREF = 1297.0000 INCHES YMRP = .0000 IN. YT  
 BREF = 1297.0000 INCHES ZMRP = 400.0000 IN. ZT  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

MACH = 1.100 RN/FT = 2.250  
 ELV-18 = .000 ELV-08 = .000  
 RUDDER = .000 SPDRK = .000

BETA0 ( 1 ) = .018 ALPHAO ( 1 ) = -6.220

## SECTION ( 1 ) ORBITER FUSELAGE

## DEPENDENT VARIABLE CP

X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.3230	.7389	.3813	.3399	.3386	.8103		-.4157		-.0783	-.1860	-.1541	-.1788	-.0620	.0483
20.000			.3927	.3315	.3221	.4742		-.4007		-.0451					
40.000			.4762	.3240	.2901	.2867		-.4399		-.4286	-.1159	-.1975	-.3238	-.0620	.0929
55.000			.5373	.3537	.2843	.2104		-.0977		-.2876					
70.000			.5717	.3672	.2759	.2278		.0079		-.1895	-.5926	-.3326	-.2432	-.1113	
90.000		.7496	.6122	.4012	.2840	.2493		.0608		-.1751	-.5323	-.5419	-.2130	-.1133	
120.000			.6675	.5020	.3822	.4006		.3004		-.1887	-.4362	-.6816	-.2646	-.1324	
140.000										-.3059					
150.000			.6833	.5623	.4838	.5109				-.4482	-.5391	-.3379	-.2784	-.1401	
151.000									.4465						
156.000								.7468							
162.000									.5142						
165.000										-.4716	-.4873	-.2553	-.2794	-.1374	
169.000								.8474							
174.000						.9773									
180.000	1.3230	.8816	.6679	.5801	.5185	.5542		.8346		-.4787	-.5628	-.2355	-.2767	-.1395	
305.000			.5136	.3675	.3143	.2142		-.1868		-.2991					
320.000			.4471	.3271	.3215	.2851		-.5006		-.0684	-.3539	-.1522	-.2076	-.0686	.0501
340.000			.4312	.3278	.3413	.4925		-.4491		-.0322					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1104	.1859	.2722	.0731	-.3655	-.3390	-.3308		-.2947	-.2974					
40.000	.0810	.1255	.1574	-.1544	-.3959	-.3309	-.3146		-.2839	-.2751					
70.000	.0540	.0920	.2239	.2733	.0305	-.0722	-.1152								
90.000	.0701	.1403	.2756	.2919	-.0421	-.1201	-.1314								
105.000			.3327	.2257	-.1275	-.1633	-.1770								
110.000								-.3506							
120.000	.0748	.2114	.3692	.1648	-.1916	-.2159	-.2601	-.3010							
135.000			.4671	.4761	-.0897	-.1047	-.1469								
150.000	.0671	.2648	.4887	.5368	.0341	-.0364	-.1280								
165.000	.0627		.4928		.2307	.0210	-.2945								
180.000	.0634	.2837	.4945	.6769											
320.000	.0731	.1641	.2571	-.0556	-.3330	-.3251	-.3121								

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## IAB1A - PRESSURE SOURCE DATA TABULATION

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ARC11-019 IAB1 LVAP(ELHL SEALED) ORB. FUSELAGE

(RET825)

BETA0 ( 1 ) = .000 ALPHA0 ( 2 ) = -4.109

SECTION ( 1 ) ORBITER FUSELAGE		DEPENDENT VARIABLE CP													
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1860	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.3128	.7447	.3651	.3151	.3100	.7945		-.4255		-.0818	-.1809	-.1339	-.1516	-.0443	.0648
20.000			.3782	.3090	.2959	.4679		-.4125		-.0491					
40.000			.4653	.3067	.2660	.2787		-.4365		-.3534	-.1093	-.1609	-.2967	-.0446	.1117
55.000			.5223	.3356	.2582	.2019		-.0945		-.2756					
70.000			.5522	.3447	.2488	.2148		.0077		-.1014	-.5856	-.3265	-.2549	-.1088	
90.000		.7244	.5885	.3756	.2552	.2399		.0664		-.1640	-.5366	-.5213	-.2174	-.1142	
120.000			.6318	.4688	.3514	.3816		.3022		-.1863	-.4404	-.6780	-.2408	-.1168	
140.000										-.2974					
150.000			.6345	.5173	.4404	.4788				-.4694	-.5667	-.3852	-.2967	-.1242	
151.000									.4351						
156.000								.7364							
162.000									.4983						
165.000										-.4843	-.5133	-.2883	-.3007	-.1218	
169.000							.8299								
174.000						.9607									
180.000	1.3128	.8308	.6146	.5297	.4751	.5210		.8149		-.5120	-.5860	-.2682	-.2990	-.1225	
305.000			.5004	.3467	.2974	.2015		-.1840		-.2768					
320.000			.4402	.3033	.3028	.2739		-.4993		-.0228	-.3441	-.1205	-.1900	-.0467	.0807
340.000			.4194	.3000	.3184	.4846		-.4542		-.0380					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1299	.1979	.2754	.0744	-.3557	-.3258	-.3132		-.2773	-.2047					
40.000	.1016	.1494	.1761	-.1108	-.3961	-.3214	-.3010		-.2648	-.2615					
70.000	.0332	-.0689	.1714	.2404	.0140	-.0819	-.1220								
90.000	.0544	.0069	.2317	.2374	-.0462	-.1253	-.1365								
105.000			.3044	.2135	-.1371	-.1747	-.1898								
110.000								-.3405							
120.000	.0652	.1411	.3364	.1014	-.1862	-.2269	-.2646	-.2825							
135.000			.4216	.4140	-.1058	-.1278	-.1655								
150.000	.0685	.2111	.4449	.4718	.0083	-.0630	-.1500								
165.000	.0746		.4486		.2141	-.0051	-.2795								
180.000	.0723	.2300	.4486	.6158											
320.000	.0985	.1886	.2670	-.0203	-.3201	-.3149	-.2973								



## ARC11-019 IAB1 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB25)

BETA0 ( 1 ) = -.015 ALPHA0( 3 ) = -2.020

SECTION ( 1 ) ORBITER FUSELAGE				DEPENDENT VARIABLE CP											
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.3087	.7501	.3334	.2716	.2668	.7654		-.4363		-.0736	-.1601	-.1398	-.1310	-.0358	.0812
20.000			.3492	.2669	.2493	.4531		-.4721		-.0746					
40.000			.4446	.2703	.2217	.2592		-.4420		-.1890	-.0989	-.1395	-.2703	-.0412	.1291
55.000			.5054	.3046	.2163	.1776		-.1013		-.2726					
70.000			.5304	.3171	.2055	.1880		-.0017		-.1826	-.5855	-.3062	-.2639	-.1229	
90.000		.7014	.5616	.3450	.2153	.2095		.0611		-.1626	-.5469	-.4839	-.2375	-.1293	
120.000			.5942	.4275	.3052	.3494		.2972		-.1919	-.4533	-.6922	-.2292	-.1250	
140.000										-.2966					
150.000			.5850	.4626	.3851	.4375			.4195	-.4977	-.6051	-.4354	-.3226	-.1146	
151.000															
156.000								.7204							
162.000									.4794						
165.000										-.5105	-.5476	-.3359	-.3347	-.1078	
169.000								.8113							
174.000							.9386								
180.000	1.3087	.7755	.5596	.4744	.4184	.4760		.7926		-.5940	-.6146	-.3138	-.3357	-.1085	
305.000			.4855	.3144	.2596	.1737		-.1889		-.2486					
320.000			.4181	.2621	.2599	.2503		-.5034		-.0381	-.3295	-.1042	-.1578	-.0357	.0950
340.000			.3919	.2567	.2732	.4671		-.5121		-.0259					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1527	.2213	.2912	.0841	-.3606	-.3290	-.3129		-.2739	-.2803					
40.000	.1271	.1805	.2026	-.0697	-.4033	-.3294	-.3028		-.2607	-.2519					
70.000	.0061	-.1463	.1130	.2089	.0006	-.0916	-.1338								
90.000	.0281	-.0697	.1915	.1924	-.0499	-.1305	-.1554								
105.000			.2592	.1913	-.1414	-.1866	-.2026								
110.000								-.3130							
120.000	.0514	.0981	.3205	.1171	-.1653	-.2313	-.2766	-.2803							
135.000			.3664	.3544	-.1077	-.1402	-.1865								
150.000	.0712	.1696	.3879	.4207	-.0118	-.0859	-.1703								
165.000	.0763		.3967		.1991	-.0272	-.2759								
180.000	.0729	.1857	.4024	.5540											
320.000	.1299	.2255	.2922	.0168	-.3186	-.3261	-.2955								

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ARC11-019 IAB1 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB25)

BETA0 ( 1 ) = -.024 ALPHA0( 4 ) = .066

SECTION ( 1 ) ORBITER FUSELAGE		DEPENDENT VARIABLE CP													
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.3183	.7437	.2742	.2177	.2135	.7217		-.4016		-.0552	-.1105	-.1184	-.1111	-.0195	.0970
20.000			.2976	.2150	.1969	.4342		-.5584		-.0469					
40.000			.4134	.2255	.1689	.2280		-.4537		-.1635	-.1126	-.1336	-.1749	-.0407	.1426
55.000			.4844	.2718	.1716	.1447		-.1142		-.2759					
70.000			.5071	.2783	.1547	.1541		-.0176		-.1873	-.5908	-.2959	-.2448	-.1360	
90.000		.6651	.5319	.3050	.1614	.1793		.0478		-.1639	-.5549	-.4120	-.2505	-.1336	
120.000			.5488	.3732	.2458	.3100		.2843		-.2055	-.4671	-.7091	-.2309	-.1289	
140.000										-.3079					
150.000			.5271	.3956	.3192	.3905				-.5297	-.6684	-.4862	-.3272	-.1086	
151.000									.4011						
156.000								.7047							
162.000									.4580						
165.000										-.5453	-.5874	-.3834	-.3614	-.1022	
169.000								.7885							
174.000							.9203								
180.000	1.3183	.7102	.4888	.4084	.3520	.4267		.7684		-.6673	-.6484	-.3592	-.3648	-.1009	
305.000			.4571	.2766	.2178	.1459		-.2048		-.2377					
320.000			.3827	.2145	.2082	.2165		-.5079		-.0695	-.2559	-.0896	-.0964	-.0275	.1088
340.000			.3398	.2030	.2219	.4410		-.5022		-.0102					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1700	.2357	.2918	.0807	-.3830	-.3299	-.3154		-.2723	-.2699					
40.000	.1480	.2050	.2188	-.0255	-.4613	-.3336	-.3161		-.2642	-.2595					
70.000	-.0319	-.1854	-.0095	.1739	-.0216	-.1080	-.1557								
90.000	.0076	-.1235	.0947	.1584	-.0803	-.1603	-.1861								
105.000			.1819	.1428	-.1701	-.2176	-.2386								
110.000								-.3123							
120.000	.0360	.0372	.2651	.1907	-.1859	-.2653	-.2923	-.2971							
135.000			.3030	.3818	-.0861	-.1679	-.2183								
150.000	.0647	.1481	.3186	.4131	-.0237	-.1127	-.1997								
165.000	.0674		.3334		.1679	-.0497	-.2775								
180.000	.0691	.1582	.3426	.4938											
320.000	.1607	.2516	.3138	.0480	-.3313	-.3520	-.2940								

ORIGINAL PAGE IS  
OF POOR QUALITY

ARC11-019 IAB1 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB25)

BETA0 (1) = -.019 ALPHA0(5) = 2.167

SECTION (1) ORBITER FUSELAGE				DEPENDENT VARIABLE CP											
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.3198	.7394	.2338	.1829	.1883	.6901		-.3248		-.0399	-.0854	-.0955	-.0843	.0018	.1122
20.000			.2673	.1845	.1687	.4203		-.5299		-.0348					
40.000			.4014	.2062	.1484	.1956		-.4590		-.1281	-.1038	-.1295	-.0907	-.0365	.1532
55.000			.4749	.2553	.1521	.1166		-.1256		-.2718					
70.000			.4939	.2577	.1295	.1300		-.0275		-.1849	-.5856	-.2825	-.2411	-.1457	
90.000		.6469	.5101	.2807	.1302	.1597		.0414		-.1594	-.5578	-.3501	-.2693	-.1410	
120.000			.5142	.3315	.1970	.2830		.2807		-.2135	-.4821	-.7208	-.2498	-.1383	
140.000										-.3158					
150.000			.4797	.3410	.2599	.3479				-.5571	-.7098	-.5297	-.3066	-.1096	
151.000									.3910						
156.000								.6964							
162.000									.4414						
165.000										-.5761	-.6284	-.4261	-.3789	-.1008	
169.000								.7733							
174.000							.9100								
180.000	1.3198	.6656	.4373	.3537	.2913	.3814		.7498		-.7253	-.6820	-.4012	-.3900	-.0994	
305.000			.4414	.2610	.1980	.1181		-.2110		-.2084					
320.000			.3515	.1917	.1836	.1809		-.5040		-.0541	-.1889	-.0691	-.0422	-.0235	.1241
340.000			.3027	.1772	.1912	.4111		-.4376		-.0072					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1885	.2529	.3011	.0834	-.3437	-.3217	-.3057			-.2623	-.2576				
40.000	.1665	.2238	.2357	-.0114	-.4287	-.3291	-.3017			-.2484	-.2454				
70.000	-.0682	-.2233	-.1716	.1534	-.0474	-.1374	-.2033								
90.000	-.0255	-.1678	.0208	.1460	-.1101	-.2006	-.2179								
105.000			.1405	.1514	-.1998	-.2558	-.2813								
110.000								-.2891							
120.000	.0131	-.0046	.2272	.1700	-.2226	-.2952	-.3199	-.3044							
135.000			.2800	.3227	-.1607	-.2070	-.2525								
150.000	.0575	.1273	.2939	.3582	-.0339	-.1402	-.2244								
165.000	.0639		.3111		.1409	-.0846	-.2769								
180.000	.0680	.1405	.3172	.4395											
320.000	.1828	.2682	.3230	.0602	-.3227	-.3305	-.2840								

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## IABIA - PRESSURE SOURCE DATA TABULATION

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ARC11-019 IAB1 LVAP(ELHL SEALED) ORB. FUSELAGE

(RET825)

BETA0 (1) = -.015 ALPHA0(6) = 4.256

SECTION (1) ORBITER FUSELAGE		DEPENDENT VARIABLE CP													
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.3183	.7328	.1847	.1654	.1748	.6629		-.3025		-.0151	-.0611	-.0692	-.0460	.0350	.1484
20.000			.2293	.1728	.1566	.4032		-.4345		-.0301					
40.000			.3852	.2038	.1539	.1628		-.4505		-.1198	-.0797	-.1138	-.0551	-.0009	.1791
55.000			.4704	.2596	.1647	.0982		-.1311		-.2602					
70.000			.4817	.2579	.1297	.1081		-.0318		-.1780	-.5219	-.2717	-.2251	-.1408	
90.000		.6297	.4938	.2718	.1213	.1404		.0428		-.1485	-.5479	-.3105	-.2763	-.1404	
120.000			.4852	.3020	.1598	.2526		.2876		-.2028	-.4901	-.7071	-.2844	-.1388	
140.000										-.3018					
150.000			.4371	.2960	.2097	.3144				-.5598	-.7315	-.5505	-.2827	-.0905	
151.000									.3880						
156.000								.6973							
162.000									.4341						
165.000										-.5882	-.6558	-.4527	-.3476	-.0611	
169.000								.7682							
174.000							.8978								
180.000	1.3183	.6184	.3914	.3061	.2373	.3457		.7432		-.7484	-.7008	-.4243	-.3781	-.0787	
305.000			.4412	.2596	.2111	.1078		-.2027		-.1703					
320.000			.3300	.1745	.1832	.1628		-.4726		-.0009	-.1483	-.0420	-.0186	.0062	.1548
340.000			.2606	.1613	.1812	.3909		-.3984		-.0077					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.2195	.2812	.3285	.1086	-.3159	-.2940	-.2842		-.2421	-.2438					
40.000	.1996	.2519	.2644	-.0067	-.3853	-.2934	-.2686		-.2272	-.2205					
70.000	-.0777	-.2597	-.2804	.1194	-.0701	-.1563	-.2288								
90.000	-.0383	-.1954	-.0431	.1123	-.1290	-.2132	-.2359								
105.000			.1316	.1103	-.2061	-.2816	-.3118								
110.000								-.2750							
120.000	-.0043	-.0535	.2266	.0969	-.2351	-.3189	-.3496	-.2919							
135.000			.2657	.3313	-.1896	-.2359	-.2767								
150.000	.0594	.0695	.2880	.3472	-.0950	-.1732	-.2497								
165.000	.0658		.2951		.1138	-.1067	-.2693								
180.000	.0689	.0921	.2985	.4539											
320.000	-.2162	.2937	.3396	.0727	-.3008	-.2960	-.2609								

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## IABIA - PRESSURE SOURCE DATA TABULATION

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ARC11-019 IAB1 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETS25)

BETA0 ( 1 ) = .000 ALPHA0 ( 7 ) = 6.355

SECTION ( 1 ) ORBITER FUSELAGE		DEPENDENT VARIABLE CP													
X/LB	.0000	.0050	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.3126	.7132	.1388	.1629	.1703	.6430		-.2743		-.0023	-.0632	-.0561	-.0312	.0491	.1554
20.000			.1832	.1565	.1524	.3741		-.3491		-.0349					
40.000			.3669	.1984	.1551	.1390		-.4336		-.0497	-.0883	-.1100	-.0454	.0235	.1828
55.000			.4593	.2597	.1758	.0840		-.1376		-.2014					
70.000			.4741	.2563	.1290	.0926		-.0423		-.1772	-.4086	-.2878	-.2299	-.1654	
90.000		.6130	.4799	.2567	.1040	.1209		.0369		-.1457	-.5474	-.3207	-.2965	-.1684	
120.000			.4527	.2695	.1233	.2192		.2823		-.2071	-.5117	-.6626	-.3557	-.1630	
140.000										-.3031					
150.000			.3938	.2529	.1578	.2697				-.5779	-.7706	-.5977	-.3005	-.0996	
151.000									.3766						
156.000								.6848							
162.000									.4172						
165.000										-.6224	-.7017	-.4952	-.3254	-.0877	
169.000							.8775	.7515							
174.000															
180.000	1.3126	.5761	.3448	.2577	.1840	.2997		.7217		-.7862	-.7357	-.4653	-.3456	-.0864	
305.000			.4258	.2644	.2216	.0946		-.2027		-.1324					
320.000			.3003	.1686	.1823	.1431		-.4065		.0403	-.1446	-.0296	-.0141	.0199	.1588
340.000			.2198	.1439	.1731	.3687		-.3491		-.0052					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.2251	.2868	.3413	.1135	-.3264	-.2906	-.2835		-.2403	-.2372					
40.000	.2031	.2492	.2756	-.0307	-.3994	-.2933	-.2602		-.2240	-.2230					
70.000	-.1125	-.3133	-.3519	.0742	-.0905	-.1936	-.2402								
90.000	-.0745	-.2391	-.0778	.0614	-.1574	-.2385	-.2605								
105.000			.0949	.0654	-.2281	-.3095	-.3476								
110.000								-.2720							
120.000	-.0447	-.0950	.1852	.0795	-.2450	-.3428	-.3797	-.3025							
135.000			.2144	.3360	-.2020	-.2653	-.3079								
150.000	.0379	.0224	.2546	.3779	-.1148	-.2097	-.2819								
165.000	.0491		.2695		.0862	-.1437	-.2778								
180.000	.0538	.0536	.2807	.4884											
320.000	.2204	.2925	.3308	.0514	-.2963	-.2951	-.2541								



ARC11-019 IAB1 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB26)

ALPHA0( 1) = -6.173 BETA0( 2) = -2.019

SECTION ( 1) ORBITER FUSELAGE		DEPENDENT VARIABLE CP													
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.2198	.5720	.1707	.1273	.1182	.7176		-.5798		-.2877	-.2636	-.1419	-.0376	.0426	.0777
20.000			.2003	.1341	.1092	.2871		-.6275		-.3023					
40.000			.3236	.1431	.0877	.0450		-.7626		-.3206	-.4029	-.1060	-.0211	.0512	.0927
55.000			.4128	.2051	.1107	.0009		-.3476		-.4436					
70.000			.4566	.2284	.1126	.0300		-.2270		-.4414	-.7890	-.1226	.0484	.0887	
90.000		.6740	.5008	.2682	.1314	.0680		-.1643		-.4163	-.8095	-.1864	.0481	.0782	
120.000			.5504	.3709	.2454	.2407		.1140		-.4040	-.7036	-.3285	.0411	.0595	
140.000										-.4161					
150.000			.5438	.4069	.3278	.3434				-.7467	-.8938	-.2425	.0381	.0483	
151.000									.2606						
156.000								.6048							
162.000									.3287						
165.000										-.8667	-.7966	-.1539	.0276	.0449	
169.000								.6888							
174.000							.8504								
180.000	1.2198	.7427	.4900	.3974	.3418	.3628		.6402		-.9391	-.8749	-.1415	.0171	.0415	
305.000			.2472	.1066	.0636	-.0785		-.5596		-.3953					
320.000			.2092	.0892	.0916	-.0126		-.9403		-.3244	-.3617	-.1232	-.0331	.0291	.0585
340.000			.2160	.1035	.1254	.2228		-.6007		-.3063					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.0792	.1560	.3337	-.0578	-.3301	-.3146	-.3031		-.2548	-.2555					
40.000	.0261	.0349	.0523	-.4399	-.3846	-.2735	-.2632		-.2593	-.2469					
70.000	-.0007	-.0564	.0379	.1250	-.1039	-.1007	-.1283								
90.000	.0270	-.0009	.1046	.1491	-.1674	-.1478	-.1566								
105.000			.1649	.1945	-.2903	-.1937	-.1980								
110.000								-.2686							
120.000	.0557	.0865	.2459	.2748	-.3899	-.2993	-.2886	-.2535							
135.000			.3217	.4398	-.2581	-.1916	-.2368								
150.000	.0681	.1367	.3383	.5300	-.1440	-.1513	-.2436								
165.000	.0689		.3304		.0390	-.1181	-.2414								
180.000	.0655	.1412	.3228	.5664											
320.000	.0326	.1743	.2771	-.0235	-.3319	-.2673	-.2693								

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## IABIA - PRESSURE SOURCE DATA TABULATION

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ARC11-019 IAB1 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB26)

ALPHA0( 1) = -6.160 BETA0 ( 3) = .037

SECTION ( 1) ORBITER FUSELAGE		DEPENDENT VARIABLE CP													
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.2158	.5600	.1618	.1175	.1093	.6314		-.5336		-.2767	-.2487	-.1336	-.0370	.0344	.0621
20.000			.1766	.1083	.0887	.2296		-.5365		-.2888					
40.000			.2672	.1037	.0547	.0094		-.7967		-.3176	-.3943	-.0923	-.0249	.0404	.0701
55.000			.3345	.1347	.0536	-.0573		-.4276		-.4544					
70.000			.3726	.1492	.0467	-.0264		-.3005		-.5287	-.8386	-.1042	.0302	.0769	
90.000		.5697	.4181	.1836	.0563	.0036		-.2425		-.5135	-.8876	-.1882	.0314	.0659	
120.000			.4842	.3020	.1779	.1823		.0307		-.5193	-.7931	-.2980	.0120	.0420	
140.000										-.5744					
150.000			.5088	.3777	.2975	.3137				-.8522	-.9251	-.1058	.0188	.0326	
151.000									.1929						
156.000								.5444							
162.000									.2702						
165.000										-.8917	-.8329	-.0609	.0199	.0353	
169.000								.6597							
174.000							.8161								
180.000	1.2158	.7290	.4932	.3967	.3383	.3637		.6476		-.9814	-.9672	-.0420	.0199	.0349	
305.000			.3108	.1509	.0912	-.0591		-.5061		-.2813					
320.000			.2356	.1047	.0977	.0067		-.7659		-.2721	-.3828	-.1122	-.0248	.0284	.0613
340.000			.2168	.1051	.1178	.2467		-.5643		-.2729					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.0609	.0983	.1799	-.1009	-.3124	-.3292	-.2787		-.2551	-.2479					
40.000	.0154	.0429	.0496	-.2667	-.3453	-.3086	-.2882		-.2551	-.2540					
70.000	-.0122	-.0592	.0113	.0835	-.1650	-.1381	-.1561								
90.000	.0211	-.0072	.0725	.1114	-.2406	-.1884	-.1841								
105.000			.1367	.1190	-.3896	-.2396	-.2296								
110.000								-.2810							
120.000	.0482	.0672	.2017	.1861	-.5005	-.3736	-.3411	-.2711							
135.000			.2977	.4241	-.3483	-.2630	-.2887								
150.000	.0624	.1268	.3233	.5306	-.2170	-.2335	-.2814								
165.000	.0654		.3244		-.0247	-.1990	-.2317								
180.000	.0658	.1413	.3275	.5727											
320.000	.0146	.0882	.1327	-.1886	-.3472	-.2852	-.2543								

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ARC11-019 IAB1 LVAP(ELPH SEALED) ORB. FUSELAGE

(RETB26)

ALPHA0(1) = -6.132 BETA0(4) = 2.107

SECTION (1) ORBITER FUSELAGE		DEPENDENT VARIABLE CP													
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.2098	.5544	.1561	.1102	.0959	.7740		-.5609		-.2892	-.2414	-.1590	-.0505	.0241	.0527
20.000			.1530	.0909	.0720	.1893		-.5954		-.2983					
40.000			.2160	.0731	.0329	-.0154		-.8969		-.3382	-.3544	-.1171	-.0279	.0347	.0625
55.000			.2651	.0814	.0064	-.0824		-.4711		-.5440					
70.000			.2980	.0852	-.0081	-.0656		-.3488		-.5878	-.7229	-.2611	.0433	.0773	
90.000		.4717	.3474	.1182	-.0069	-.0503		-.2866		-.5795	-.5686	-.4437	.0508	.0667	
120.000			.4244	.2459	.1197	.1260		-.0302		-.6011	-.8627	-.4185	-.0140	.0347	
140.000										-.7906					
150.000			.4715	.3547	.2647	.2823				-.8895	-.9271	-.1085	-.0042	.0265	
151.000									.1337						
156.000								.4999							
162.000									.2264						
165.000										-.8736	-.8852	-.0821	.0056	.0310	
169.000								.6414							
174.000							.8036								
180.000	1.2098	.7161	.4943	.3965	.3332	.3550		.6482		-.9619	-.8631	-.0671	.0116	.0352	
305.000			.3838	.2033	.1392	-.0177		-.4222		-.2330					
320.000			.2706	.1236	.1132	.0367		-.6383		-.2540	-.4146	-.1085	-.0193	.0401	.0918
340.000			.2274	.1062	.1193	.2796		-.5738		-.2559					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.0637	.1109	.1976	-.0534	-.2980	-.2923	-.3093		-.2876	-.2652					
40.000	.0344	.1041	.2162	-.0731	-.2912	-.2961	-.2915		-.2910	-.2883					
70.000	-.0013	-.0564	-.0062	.0572	-.2355	-.1895	-.1723								
90.000	.0242	-.0077	.0594	.0755	-.3068	-.2570	-.2091								
105.000			.1160	.0793	-.4606	-.3014	-.2433								
110.000								-.2945							
120.000	.0394	.0560	.1695	.0942	-.5878	-.5258	-.3720	-.2796							
135.000			.2690	.3628	-.4406	-.3989	-.3093								
150.000	.0569	.1145	.3001	.5258	-.2836	-.3367	-.3230								
165.000	.0565		.3115		-.0821	-.2744	-.2390								
180.000	.0592	.1396	.3210	.5773											
320.000	.0185	.0560	.0401	-.3617	-.3579	-.2926	-.2895								

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## IAB1A - PRESSURE SOURCE DATA TABULATION

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ARC11-019 IAB1 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB26)

ALPHA0 (1) = -6.123 BETA0 (5) = 4.151

SECTION (1) ORBITER FUSELAGE		DEPENDENT VARIABLE CP													
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.1894	.5329	.1352	.0925	.0776	.7636		-.5123		-.3213	-.2710	-.1943	-.0768	.0004	.0337
20.000			.1147	.0594	.0418	.1256		-.6002		-.3285					
40.000			.1511	.0278	-.0065	-.0807		-.8873		-.3761	-.3352	-.1424	-.0548	.0167	.0428
55.000			.1864	.0171	-.0437	-.1272		-.5291		-.5689					
70.000			.2181	.0152	-.0681	-.1109		-.4014		-.6432	-.4875	-.3573	.0110	.0782	
90.000		.3568	.2681	.0407	-.0719	-.1056		-.3448		-.6448	-.5158	-.5068	-.0212	.0601	
120.000			.3537	.1717	.0453	.0686		-.1098		-.6891	-.7471	-.4266	-.1001	.0250	
140.000										-.8986					
150.000			.4257	.3164	.2270	.2428				-.9326	-.9197	-.1123	-.0514	.0055	
151.000									.0666						
156.000								.4452							
162.000									.1711						
165.000										-.8829	-.9285	-.0688	-.0328	.0127	
169.000								.6028							
174.000							.7746								
180.000	1.1894	.6911	.4854	.3860	.3249	.3487		.6262		-.9555	-.8105	-.0650	-.0143	.0203	
305.000			.4521	.2559	.1805	.0237		-.3467		-.2500					
320.000			.2912	.1354	.1152	.0548		-.6172		-.2756	-.6731	-.0998	-.0121	.0443	.1102
340.000			.2216	.1008	.1068	.2985		-.5666		-.2737					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.0516	.1352	.2731	.0204	-.3141	-.3046	-.3177		-.2815	-.2624					
40.000	.0382	.1478	.2930	.0006	-.3092	-.3103	-.3006		-.2979	-.2845					
70.000	.0009	-.0535	-.0295	.0318	-.2947	-.2506	-.2076								
90.000	.0173	-.0162	.0269	.0413	-.3686	-.3297	-.2449								
105.000			.0818	.0474	-.5147	-.3925	-.2575								
110.000								-.2884							
120.000	.0283	.0383	.1256	.0198	-.6735	-.6189	-.4716	-.2797							
135.000			.2294	.3316	-.5043	-.4908	-.5112								
150.000	.0405	.0970	.2663	.5208	-.3476	-.4363	-.4129								
165.000	.0447		.2846		-.1282	-.3585	-.2389								
180.000	.0477	.1275	.3075	.5410											
320.000	.0146	.0654	.0703	-.4523	-.3807	-.3002	-.2942								

ARC11-019 IA81 LVAP(ELHL SEALED) ORB. FUSELAGE

(RET826)

ALPHA( 2) = -4.098 BETA( 1) = -6.117

SECTION ( 1) ORBITER FUSELAGE				DEPENDENT VARIABLE CP											
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.1848	.5730	.1566	.0987	.0901	.7790		-.4411		-.3272	-.3068	-.1700	-.0744	.0458	.1096
20.000			.2211	.1342	.1007	.3403		-.5106		-.3242					
40.000			.4192	.1927	.1268	.0967		-.6033		-.3990	-.4074	-.1161	-.0275	.0789	.1379
55.000			.5482	.3215	.2164	.0903		-.2089		-.2354					
70.000			.5942	.3559	.2304	.1290		-.1004		-.2163	-.7146	-.0994	.0322	.0891	
90.000		.8243	.6212	.3903	.2486	.1709		-.0358		-.1960	-.6694	-.1650	.0274	.0789	
120.000			.6104	.4322	.3091	.3125		.2249		-.2211	-.5946	-.6841	.0000	.0289	
140.000										-.1972					
150.000			.5258	.3725	.3079	.3350				-.2973	-.9968	-.3471	-.0034	.0010	
151.000									.3376						
156.000								.6569							
162.000									.3726						
165.000										-.8919	-.8548	-.2581	-.0192	-.0065	
169.000								.6824							
174.000							.8380								
180.000	1.1848	.6772	.3965	.3140	.2679	.2980		.5359		-1.0584	-.8609	-.1897	-.0448	-.0179	
305.000			.0909	-.0139	-.0328	-.1637		-.6826		-.3998					
320.000			.1217	.0126	.0243	-.1374		-.5603		-.3797	-.3462	-.1965	-.0959	-.0111	.0517
340.000			.1754	.0542	.0876	.1301		-.4663		-.3520					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1205	.2388	.4672	.0406	-.3497	-.3103	-.3155		-.2714	-.2691					
40.000	.0381	.0579	.1460	-.2958	-.4815	-.2952	-.2821		-.2664	-.2505					
70.000	-.0667	-.1216	.0420	.1909	-.0053	-.0170	-.0752								
90.000	-.0311	-.0637	.1131	.2349	-.0589	-.0623	-.1101								
105.000			.1835	.2951	-.1616	-.1130	-.1465								
110.000								-.2805							
120.000	-.0232	.0337	.2921	.3784	-.2241	-.1650	-.1758	-.2323							
135.000			.3493	.3961	-.1655	-.0999	-.1693								
150.000	-.0004	.0904	.3390	.3436	-.0952	-.0604	-.1914								
165.000	-.0012		.3042		.1395	-.0150	-.2540								
180.000	-.0008	.0859	.2659	.4048											
320.000	.1113	.2656	.3951	.0944	-.3527	-.3200	-.2760								

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## IAB1A - PRESSURE SOURCE DATA TABULATION

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ARC11-019 IAB1 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB26)

ALPHA0 ( 2 ) = -4.086 BETA0 ( 2 ) = -4.069

SECTION ( 1 ) ORBITER FUSELAGE		DEPENDENT VARIABLE CP													
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.2010	.5809	.1599	.1104	.0962	.7681		-.5445		-.2851	-.2524	-.1435	-.0425	.0448	.1025
20.000			.2094	.1313	.0984	.3052		-.5072		-.2859					
40.000			.3716	.1659	.0992	.0620		-.6349		-.3931	-.4056	-.1066	-.0201	.0634	.1219
55.000			.4756	.2601	.1535	.0382		-.2819		-.2729					
70.000			.5177	.2852	.1603	.0664		-.1681		-.2661	-.7556	-.0866	.0272	.0745	
90.000		.7433	.5497	.3209	.1753	.1089		-.1027		-.2764	-.7726	-.1431	.0230	.0646	
120.000			.5645	.3874	.2614	.2576		.1656		-.3105	-.6600	-.2775	.0048	.0345	
140.000										-.3032					
150.000			.5127	.3696	.2945	.3206				-.4996	-.9966	-.2120	.0041	.0179	
151.000									.2825						
156.000								.6222							
162.000									.3304						
165.000										-.9145	-.8701	-.1329	-.0051	.0137	
169.000								.6748							
174.000							.8325								
180.000	1.2010	.6848	.4168	.3296	.2818	.3094		.5765		-1.0578	-.8505	-.0784	-.0169	.0080	
305.000			.1579	.0327	.0029	-.1392		-.6274		-.3322					
320.000			.1640	.0434	.0505	-.0878		-.5033		-.3127	-.3326	-.1484	-.0595	.0213	.0636
340.000			.1940	.0683	.0958	.1575		-.4824		-.3105					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1253	.2200	.4438	.0189	-.3311	-.3023	-.2986		-.2473	-.2488					
40.000	.0449	.0513	.1278	-.3231	-.4385	-.2755	-.2589		-.2427	-.2282					
70.000	-.0633	-.1219	.0279	.1450	-.0458	-.0568	-.0894								
90.000	-.0291	-.0625	.0988	.1833	-.1109	-.1035	-.1253								
105.000			.1640	.2290	-.2210	-.1510	-.1635								
110.000								-.2719							
120.000	-.0008	.0458	.2650	.3233	-.2966	-.2234	-.2208	-.2350							
135.000			.3282	.3991	-.2223	-.1467	-.2086								
150.000	.0195	.1045	.3229	.3800	-.1338	-.1142	-.2197								
165.000	.0199		.3018		.0727	-.0852	-.2393								
180.000	.0192	.1049	.2761	.4463											
320.000	.0862	.2402	.3555	.0357	-.3280	-.2830	-.2516								

ORIGINAL PAGE IS  
OF POOR QUALITY

ARC11-019 IA81 LVAP(ELHL SEALED) ORB. FUSELAGE

(RET926)

ALPHA( 2) = -4.071 BETA( 3) = .025

SECTION ( 1) ORBITER FUSELAGE					DEPENDENT VARIABLE CP										
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.2153	.5858	.1672	.1092	.0979	.6295		-.5407		-.2703	-.2438	-.1384	-.0340	.0410	.0731
20.000			.1784	.1020	.0815	.2264		-.5286		-.2699					
40.000			.2704	.0993	.0511	.0068		-.7642		-.3021	-.3883	-.1044	-.0211	.0470	.0861
55.000			.3314	.1290	.0454	-.0559		-.4216		-.3907					
70.000			.3636	.1408	.0335	-.0344		-.2957		-.5077	-.8364	-.1285	.0205	.0626	
90.000		.5509	.4028	.1720	.0419	-.0086		-.2314		-.4994	-.8162	-.1868	.0254	.0523	
120.000			.4545	.2755	.1503	.1617		.0367		-.5209	-.8032	-.3396	.0183	.0326	
140.000										-.5943					
150.000			.4626	.3315	.2515	.2787				-.8753	-.9731	-.2114	.0277	.0239	
151.000									.1787						
156.000								.5347							
162.000									.2491						
165.000										-.9223	-.8835	-.1126	.0239	.0232	
169.000								.6429							
174.000							.8020								
180.000	1.2153	.6753	.4420	.3475	.2868	.3245		.6270		-.9616	-1.0148	-.0858	.0224	.0220	
305.000			.3104	.1414	.0853	-.0617		-.4954		-.2434					
320.000			.2428	.0987	.0907	.0018		-.6625		-.2690	-.3657	-.1191	-.0253	.0350	.0777
340.000			.2207	.0945	.1088	.2429		-.5588		-.2663					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.0803	.1117	.1762	-.0992	-.3244	-.3293	-.2736		-.2578	-.2418					
40.000	.0388	.0640	.0618	-.2336	-.3320	-.2943	-.2797		-.2456	-.2391					
70.000	-.0588	-.1142	.0168	.0729	-.1846	-.1398	-.1507								
90.000	-.0215	-.0543	.0534	.0913	-.2715	-.1959	-.1881								
105.000			.1152	.1260	-.4151	-.2447	-.2305								
110.000								-.2800							
120.000	.0140	.0366	.1869	.1586	-.5185	-.3664	-.3290	-.2609							
135.000			.2730	.3833	-.3911	-.2751	-.2942								
150.000	.0350	.0961	.2944	.4915	-.2607	-.2568	-.2865								
165.000	.0362		.2959		-.0643	-.2328	-.2242								
180.000	.0377	.1114	.3001	.5311											
320.000	.0407	.1034	.1317	-.1698	-.3419	-.2824	-.2441								

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## IA81A - PRESSURE SOURCE DATA TABULATION

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ARC11-019 IA81 LVAP(ELHL SEALED) ORB. FUSELAGE

(RET826)

ALPHA0( 2) = -4.050 BETA0 ( 4) = 4.127

## SECTION ( 1) ORBITER FUSELAGE

## DEPENDENT VARIABLE CP

X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.1893	.5547	.1410	.0879	.0693	.7588		-.5146		-.3055	-.2640	-.2014	-.0790	.0031	.0434
20.000			.1216	.0487	.0270	.1152		-.5683		-.3252					
40.000			.1506	.0141	-.0206	-.0959		-.7801		-.3505	-.3411	-.1502	-.0555	.0194	.0495
55.000			.1805	.0008	-.0605	-.1394		-.5336		-.5332					
70.000			.2073	-.0019	-.0872	-.1209		-.4031		-.6368	-.4966	-.3465	.0005	.0610	
90.000		.3360	.2503	.0259	-.0891	-.1094		-.3403		-.6345	-.5134	-.4860	-.0109	.0561	
120.000			.3252	.1454	.0229	.0471		-.1063		-.6887	-.7407	-.4694	-.0476	.0232	
140.000										-.9194					
150.000			.3833	.2717	.1832	.2078				-.9557	-.9733	-.1614	-.0328	.0026	
151.000									.0529						
156.000								.4345							
162.000									.1516						
165.000										-.8805	-.9851	-.0933	-.0253	.0042	
169.000								.5854							
174.000							.7580								
180.000	1.1893	.6393	.4334	.3383	.2751	.3097		.6050		-1.0684	-.8644	-.1138	-.0124	.0026	
305.000			.4547	.2588	.1794	.0198		-.3328		-.2426					
320.000			.3071	.1359	.1117	.0513		-.5782		-.2583	-.6188	-.1066	-.0071	.0484	.1212
340.000			.2280	.0955	.0948	.2936		-.5226		-.2709					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.0686	.1498	.2801	.0255	-.3178	-.3052	-.3154		-.2684	-.2551					
40.000	.0656	.1697	.3098	.0209	-.3132	-.2976	-.2952		-.2932	-.2890					
70.000	-.0446	-.1011	-.0553	.0083	-.3102	-.2885	-.2014								
90.000	-.0088	-.0504	.0102	.0293	-.3874	-.3486	-.2487								
105.000			.0643	.0361	-.5266	-.4308	-.2525								
110.000								-.2895							
120.000	.0080	.0186	.1150	.0296	-.6666	-.6307	-.3486	-.2651							
135.000			.2172	.3256	-.5217	-.5095	-.5236								
150.000	.0198	.0781	.2481	.4865	-.3729	-.4698	-.4126								
165.000	.0198		.2607		-.1568	-.3955	-.2296								
180.000	.0206	.0987	.2858	.4899											
320.000	.0320	.0769	.0807	-.4525	-.3680	-.2960	-.2933								

ARC11-019 IAB1 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB26)

ALPHA( 2) = -4.048 BETA( 5) = 6.181

SECTION ( 1) ORBITER FUSELAGE		DEPENDENT VARIABLE CP													
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.1632	.5435	.1304	.0677	.0466	.6819		-.4690		-.3791	-.3173	-.2691	-.1176	-.0439	-.0020
20.000			.0914	.0141	-.0008	.0592		-.4968		-.3972					
40.000			.0937	-.0277	-.0546	-.1518		-.6311		-.3983	-.3367	-.1881	-.0946	.0017	.0413
55.000			.1107	-.0558	-.1062	-.1817		-.5821		-.5729					
70.000			.1362	-.0626	-.1354	-.1524		-.4448		-.6791	-.4563	-.4373	-.0715	.0692	
90.000		.2250	.1784	-.0436	-.1460	-.1462		-.3810		-.6821	-.4985	-.5442	-.1089	.0605	
120.000			.2588	.0810	-.0463	.0077		-.1675		-.7611	-.5773	-.5173	-.1528	.0209	
140.000										-.9876					
150.000			.3260	.2261	.1317	.1700				-.9918	-.9790	-.2193	-.0880	-.0218	
151.000									-.0125						
156.000								.3685							
162.000									.1012						
165.000										-.8824	-.9920	-.1350	-.0665	-.0260	
169.000								.5446							
174.000							.7167								
180.000	1.1632	.5943	.4045	.3143	.2484	.2879		.5680		-1.0909	-.8596	-.1592	-.0511	-.0268	
305.000			.5309	.3275	.2349	.0735		-.2309		-.1991					
320.000			.3420	.1622	.1264	.0750		-.5831		-.2422	-.6777	-.1002	-.0119	.0531	.1277
340.000			.2345	.0944	.0849	.3082		-.4717		-.2788					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.0352	.1406	.2774	.0407	-.3423	-.3192	-.3289		-.2925	-.2640					
40.000	.0695	.1991	.3439	.0946	-.3369	-.3189	-.3121		-.3104	-.2933					
70.000	-.0355	-.0890	-.0698	-.0120	-.3419	-.3476	-.2505								
90.000	-.0074	-.0507	-.0135	.0032	-.4148	-.4185	-.2866								
105.000			.0409	.0324	-.5527	-.4882	-.3003								
110.000								-.2662							
120.000	.0074	.0109	.0846	-.0171	-.7247	-.7051	-.6038	-.2504							
135.000			.1792	.2856	-.5648	-.5978	-.5924								
150.000	.0062	.0588	.2206	.4580	-.4219	-.5567	-.4774								
165.000	.0006		.2422		-.1949	-.4495	-.2515								
180.000	-.0025	.0812	.2741	.4447											
320.000	.0305	.0945	.0988	-.4558	-.3851	-.3121	-.3062								

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## 1A81A - PRESSURE SOURCE DATA TABULATION

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ARC11-019 1A81 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB26)

ALPHA( 3) = -2.011 BETA( 1) = -6.126

SECTION ( 1) ORBITER FUSELAGE		DEPENDENT VARIABLE CP													
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.1771	.5898	.1588	.0947	.0817	.7722		-.4782		-.3045	-.2846	-.1645	-.0699	.0584	.1247
20.000			.2323	.1357	.0947	.3298		-.4296		-.2773					
40.000			.4329	.2022	.1278	.0898		-.5602		-.3652	-.3980	-.1158	-.0230	.0869	.1533
55.000			.5507	.3227	.2125	.0875		-.1887		-.2329					
70.000			.5857	.3485	.2159	.1156		-.0856		-.2091	-.6874	-.1212	.0114	.0664	
90.000		.8020	.6036	.3698	.2277	.1576		-.0271		-.1882	-.6671	-.1781	.0072	.0565	
120.000			.5732	.3915	.2692	.2759		.2164		-.2361	-.6142	-.5797	-.0368	-.0087	
140.000										-.2578					
150.000			.4706	.3181	.2565	.2894				-.3281	-1.0571	-.3517	-.0129	-.0227	
151.000									.3160						
155.000								.6381							
162.000									.3421						
165.000										-.9298	-.9069	-.2344	-.0247	-.0246	
169.000								.6593							
174.000							.8129								
180.000	1.1771	.6204	.3396	.2578	.2166	.2563		.5083		-1.0943	-.9077	-.1717	-.0383	-.0281	
305.000			.0779	-.0323	-.0503	-.1865		-.6712		-.3415					
320.000			.1224	-.0014	.0092	-.1630		-.4921		-.3422	-.3549	-.1940	-.0751	.0020	.0660
340.000			.1783	.0436	.0699	.1106		-.4148		-.3399					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1361	.2451	.4676	.0421	-.3362	-.2939	-.2982		-.2538	-.2489					
40.000	.0569	.0712	.1554	-.2899	-.4647	-.2821	-.2700		-.2405	-.2344					
70.000	-.1297	-.2093	.0104	.1762	-.0018	-.0140	-.0631								
90.000	-.0866	-.1348	.0831	.2217	-.0558	-.0587	-.1047								
105.000			.1539	.2859	-.1603	-.1052	-.1412								
110.000								-.2701							
120.000	-.0885	-.0243	.2693	.3261	-.2375	-.1641	-.1692	-.2235							
135.000			.3340	.3455	-.1971	-.1123	-.1795								
150.000	-.0434	.0591	.3195	.2847	-.1322	-.0799	-.1952								
165.000	-.0323		.2836	.1186	-.0273	-.2369									
180.000	-.0270	.0633	.2454	.3542											
320.000	.1339	.2788	.3963	.0996	-.3389	-.3020	-.2567								



ARC11-019 IAB1 LVAP(ELHL SEALED) ORB. FUSELAGE

(RET225)

ALPHA0( 3) = -1.998 BETA0 ( 2) = -2.045

SECTION ( 1) ORBITER FUSELAGE				DEPENDENT VARIABLE CP											
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4370	.5740
PHI															
.000	1.2171	.6189	.1824	.1097	.0963	.7227		-.5588		-.2625	-.2477	-.1411	-.0355	.0614	.1041
20.000			.2174	.1195	.0914	.2803		-.5041		-.2557					
40.000			.3412	.1395	.0816	.0386		-.6501		-.3071	-.3919	-.1176	-.0167	.0670	.1237
55.000			.4139	.1927	.1008	-.0052		-.3393		-.2497					
70.000			.4404	.2059	.0910	.0204		-.2233		-.3078	-.7636	-.1919	.0163	.0606	
90.000		.6388	.4673	.2357	.0997	.0578		-.1521		-.3843	-.7465	-.2612	.0230	.0527	
120.000			.4839	.3044	.1844	.2018		.1170		-.4105	-.7083	-.4067	.0407	.0298	
140.000										-.4737					
150.000			.4485	.3101	.2377	.2757				-.8306	-1.0068	-.3520	.0554	.0237	
151.000									.2375						
156.000								.5820							
162.000									.2896						
165.000										-.9252	-.8814	-.2743	.0437	.0214	
169.000								.6521							
174.000							.8209								
180.000	1.2171	.6358	.3854	.2968	.2472	.2849		.5970		-1.0217	-1.0307	-.2713	.0347	.0180	
305.000			.2339	.0797	.0386	-.0950		-.5557		-.2345					
320.000			.2184	.0733	.0713	-.0284		-.5537		-.2788	-.3355	-.1679	-.0370	.0396	.0833
340.000			.2256	.0846	.1033	.2171		-.5286		-.2837					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1192	.1892	.3386	-.0532	-.3304	-.2930	-.2866		-.2332	-.2321					
40.000	.0716	.0774	.0763	-.4121	-.3644	-.2617	-.2533		-.2483	-.2366					
70.000	-.1072	-.1960	-.0302	.1032	-.1303	-.0934	-.1136								
90.000	-.0665	-.1269	.0514	.1308	-.2015	-.1443	-.1416								
105.000			.1231	.1682	-.3436	-.1930	-.1812								
110.000								-.2483							
120.000	-.0227	.0065	.2201	.2652	-.4368	-.2760	-.2479	-.2260							
135.000			.2721	.3907	-.3285	-.2137	-.2392								
150.000	.0083	.0770	.2778	.4571	-.2145	-.1974	-.2445								
165.000	.0087		.2732		-.0315	-.1748	-.2297								
180.000	.0124	.0853	.2679	.4808											
320.000	.0944	.2174	.3125	.0024	-.3130	-.2571	-.2388								

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## IABIA - PRESSURE SOURCE DATA TABULATION

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ARC11-019 IAB1 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB26)

ALPHA0( 3) = -1.984 BETA0( 3) = 2.071

SECTION ( 1) ORBITER FUSELAGE			DEPENDENT VARIABLE CP													
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740	
PHI																
.000	1.2079	.6075	.1687	.1018	.0813	.7727		-.4936		-.2498	-.2255	-.1487	-.0412	.0384	.0798	
20.000			.1663	.0837	.0555	.1805		-.5482		-.2608						
40.000			.2244	.0647	.0152	-.0325		-.8180		-.2898	-.3395	-.1182	-.0216	.0467	.0885	
55.000			.2577	.0610	-.0133	-.0998		-.4651		-.3852						
70.000			.2759	.0602	-.0395	-.0851		-.3362		-.4912	-.8359	-.1468	.0104	.0475		
90.000		.4343	.3116	.0901	-.0327	-.0528		-.2719		-.5440	-.8237	-.3161	.0334	.0414		
120.000			.3642	.1904	.0685	.1006		-.0159		-.6000	-.8721	-.4506	.0203	.0286		
140.000										-.7959						
150.000			.3824	.2665	.1809	.2214				-.9480	-1.0126	-.2314	.0229	.0169		
151.000									.1100							
156.000								.4788								
162.000									.1922							
165.000										-.9286	-.9725	-.1643	.0252	.0446		
169.000								.6096								
174.000							.7723									
180.000	1.2079	.6095	.3882	.2948	.2428	.2928		.6077		-1.0343	-.9809	-.1602	.0252	.0165		
305.000			.3933	.2021	.1384	-.0187		-.3828		-.2449						
320.000			.2976	.1284	.1117	.0319		-.5651		-.2540	-.3899	-.1206	-.0054	.0559	.1238	
340.000			.2465	.1022	.1029	.2736		-.4920		-.2471						
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450						
PHI																
.000	.0995	.1371	.2087	-.0344	-.2909	-.2907	-.3010			-.2686	-.2428					
40.000	.0866	.1550	.2549	-.0245	-.2867	-.2736	-.2661			-.2751	-.2671					
70.000	-.0950	-.1603	-.0510	.0329	-.2761	-.1909	-.1629									
90.000	-.0561	-.0930	.0158	.0554	-.3503	-.2518	-.1906									
105.000			.0829	.0805	-.4806	-.2383	-.2213									
110.000								-.2776								
120.000	-.0112	.0032	.1488	.1023	-.5905	-.5580	-.3077	-.2506								
135.000			.2353	.3375	-.4845	-.4414	-.2609									
150.000	.0116	.0662	.2592	.4580	-.3530	-.3913	-.2997									
165.000	.0124		.2653		-.1390	-.3515	-.2224									
180.000	.0101	.0866	.2703	.4974												
320.000	.0630	.0882	.0653	-.3318	-.3355	-.2896	-.2795									

ORIGINAL PAGE IS  
OF POOR QUALITY

ARC11-019 IA81 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB26)

ALPHA0( 3) = -1.975 BETA0( 4) = 6.155

## SECTION ( 1) ORBITER FUSELAGE

## DEPENDENT VARIABLE CP

X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.1561	.5676	.1353	.0654	.0316	.6685		-.4700		-.3726	-.2940	-.2568	-.1043	-.0304	.0194
20.000			.0917	.0106	-.0161	.0515		-.4228		-.3798					
40.000			.0863	-.0324	-.0748	-.1648		-.4874		-.3612	-.3245	-.1802	-.0778	.0098	.0591
55.000			.0984	-.0678	-.1292	-.1917		-.5834		-.4320					
70.000			.1174	-.0769	-.1571	-.1662		-.4432		-.6227	-.4489	-.3877	-.0391	.0462	
90.000		.2081	.1578	-.0553	-.1628	-.1504		-.3763		-.6772	-.5170	-.5154	-.0402	.0477	
120.000			.2262	.0593	-.0650	-.0069		-.1589		-.7630	-.5660	-.5188	-.0873	.0177	
140.000										-1.0088					
150.000			.2799	.1864	.0949	.1369				-1.0348	-1.0329	-.2377	-.0627	-.0199	
151.000									-.0316						
156.000								.3563							
162.000									.0733						
165.000										-.9174	-1.0428	-.1391	-.0562	-.0298	
169.000								.5276							
174.000							.6854								
180.000	1.1561	.5377	.3491	.2602	.2048	.2481		.5442		-1.1174	-.9062	-.1532	-.0452	-.0313	
305.000			.5376	.3288	.2478	.0788		-.1767		-.1697					
320.000			.3611	.1645	.1364	.0719		-.4619		-.2183	-.6104	-.0929	-.0081	.0687	.1453
340.000			.2462	.0895	.0833	.3004		-.4025		-.2676					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.0599	.1516	.2913	.0389	-.3195	-.3115	-.3115		-.2709	-.2408					
40.000	.1026	.2165	.3569	.1030	-.3290	-.3019	-.3012		-.2884	-.2816					
70.000	-.0740	-.1410	-.0958	-.0287	-.3465	-.3450	-.2237								
90.000	-.0401	-.0852	-.0302	-.0142	-.4242	-.4155	-.2594								
105.000			.0285	.0152	-.5578	-.5025	-.2668								
110.000									-.2679						
120.000	-.0176	-.0100	.0732	.0156	-.7125	-.7075	-.4583	-.2419							
135.000			.1622	.2806	-.5783	-.6078	-.6085								
150.000	-.0161	.0442	.2038	.4074	-.4525	-.5792	-.4590								
165.000	-.0256		.2206		-.2242	-.4791	-.2469								
180.000	-.0321	.0632	.2515	.4002											
320.000	.0466	.1124	.1042	-.4501	-.3774	-.2997	-.3046								

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PAGE 429

ARC11-019 IAB1 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB26)

ALPHA( 4) = .071 BETA( 1) = -6.134

SECTION ( 1) ORBITER FUSELAGE				DEPENDENT VARIABLE CP											
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.1777	.6186	.1759	.0906	.0753	.7734		-.4460		-.2865	-.2643	-.1484	-.0607	.0759	.1395
20.000			.2536	.1340	.0946	.3344		-.3623		-.2617					
40.000			.4549	.2066	.1398	.0980		-.4860		-.2899	-.3574	-.1107	-.0086	.1079	.1749
55.000			.5696	.3309	.2240	.0927		-.1548		-.1916					
70.000			.5886	.3461	.2164	.1238		-.0710		-.1837	-.6326	-.1617	-.0059	.0593	
90.000		.7929	.5932	.3583	.2179	.1590		-.0148		-.1627	-.6475	-.2310	-.0124	.0461	
120.000			.5418	.3541	.2339	.2513		.2214		-.2365	-.6087	-.6871	-.0745	-.0462	
140.000										-.2994					
150.000			.4244	.2640	.2055	.2559				-.3628	-1.0803	-.4440	.0107	-.0389	
151.000									.3128						
156.000								.6308							
162.000									.3339						
165.000										-.9568	-1.0023	-.3922	.0058	-.0385	
169.000								.6459							
174.000							.7986								
180.000	1.1777	.5671	.2868	.2152	.1702	.2176		.4874		-1.1137	-.9216	-.2654	-.0033	-.0363	
305.000			.0716	-.0457	-.0727	-.1974		-.6019		-.3030					
320.000			.1203	-.0070	-.0090	-.1676		-.4318		-.3269	-.3311	-.2004	-.0741	.0113	.0859
340.000			.1804	.0392	.0616	.1119		-.3776		-.3132					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1601	.2668	.4739	.0585	-.3443	-.2915	-.3111			-.2546	-.2481				
40.000	.0874	.1032	.1721	-.2928	-.4648	-.2783	-.2692			-.2432	-.2409				
70.000	-.1778	-.3107	-.0320	.1690	.0077	-.0018	-.0511								
90.000	-.1330	-.2359	.0506	.2134	-.0482	-.0519	-.0964								
105.000			.1275	.2700	-.1520	-.0978	-.1360								
110.000								-.2580							
120.000	-.1577	-.0940	.2615	.2744	-.2438	-.1622	-.1554	-.2181							
135.000			.3243	.2923	-.2210	-.1253	-.1786								
150.000	-.0844	.0209	.3072	.2300	-.1660	-.0983	-.2002								
165.000	-.0646		.2677		.1028	-.0477	-.2348								
180.000	-.0525	.0396	.2320	.2961											
320.000	.1685	.2912	.4090	.1072	-.3454	-.3202	-.2542								

ARC11-019 1A81 LVAP(ELHL SEALED) ORB. FUSELAGE

(RET826)

ALPHA( 4) = .076 BETA( 2) = -4.088

SECTION ( 1) ORBITER FUSELAGE		DEPENDENT VARIABLE CP													
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.1998	.6347	.1856	.0996	.0900	.7661		-.4522		-.2520	-.2429	-.1369	-.0387	.0715	.1349
20.000			.2415	.1276	.0926	.3086		-.3816		-.2471					
40.000			.4036	.1780	.1104	.0668		-.4944		-.2715	-.3728	-.1099	-.0090	.0945	.1622
55.000			.4927	.2603	.1596	.0428		-.2402		-.2347					
70.000			.5128	.2716	.1464	.0667		-.1413		-.2242	-.7088	-.1753	-.0112	.0493	
90.000		.7089	.5217	.2891	.1505	.1023		-.0754		-.2234	-.7019	-.2384	-.0120	.0410	
120.000			.4973	.3110	.1961	.2276		.1728		-.3054	-.6521	-.4726	-.0350	-.0150	
140.000										-.3743					
150.000			.4167	.2652	.2076	.2536				-.6257	-1.0683	-.4248	.0282	-.0103	
151.000									.2728						
156.000									.6037						
162.000									.3074						
165.000										-.9586	-.9154	-.3728	.0425	-.0065	
169.000										.6432					
174.000							.8110								
180.000	1.1998	.5779	.3141	.2338	.1873	.2402		.5368		-1.0931	-.9249	-.2256	.0256	-.0072	
305.000			.1508	.0090	-.0238	-.1503		-.5433		-.2798					
320.000			.1743	.0332	.0343	-.0915		-.4161		-.2913	-.3024	-.1773	-.0462	.0383	.0921
340.000			.2099	.0612	.0791	.1619		-.3894		-.2894					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1619	.2556	.4556	.0485	-.3275	-.2885	-.2834		-.2408	-.2416					
40.000	.0864	.1014	.1541	-.3299	-.4222	-.2643	-.2557		-.2412	-.2309					
70.000	-.1752	-.2992	-.0526	.1251	-.0566	-.0441	-.0788								
90.000	-.1265	-.2235	.0316	.1573	-.1218	-.0937	-.1213								
105.000			.1142	.1914	-.2373	-.1417	-.1589								
110.000								-.2505							
120.000	-.1137	-.0686	.2348	.2199	-.3449	-.2143	-.1936	-.2126							
135.000			.2989	.2820	-.3010	-.1714	-.2065								
150.000	-.0482	.0365	.2880	.2366	-.2113	-.1521	-.2183								
165.000	-.0364		.2641		.0320	-.1274	-.2221								
180.000	-.0273	.0513	.2391	.3586											
320.000	.1484	.2712	.3815	.0536	-.3181	-.2883	-.2448								

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ARC11-019 IAB1 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB26)

ALPHA0 ( 4 ) = .079 BETA0 ( 3 ) = .002

## SECTION ( 1 ) ORBITER FUSELAGE

## DEPENDENT VARIABLE CP

X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.2154	.6389	.1845	.1004	.0858	.6220		-.4745		-.2266	-.2072	-.1221	-.0256	.0661	.1005
20.000			.1985	.0962	.0695	.2268		-.4475		-.2311					
40.000			.2900	.0981	.0457	-.0004		-.5685		-.2647	-.3322	-.1107	-.0131	.0692	.1177
55.000			.3349	.1182	.0388	-.0641		-.3883		-.2850					
70.000			.3503	.1194	.0119	-.0399		-.2748		-.3095	-.7902	-.1720	-.0090	.0352	
90.000		.5171	.3743	.1414	.0161	-.0069		-.2058		-.3588	-.8154	-.2285	.0035	.0326	
120.000			.3959	.2108	-.0944	.1380		.0510		-.5102	-.7586	-.3811	.0333	.0167	
140.000										-.5983					
150.000			.3762	.2435	.1688	.2223				-.9257	-1.0327	-.3494	.0492	.0092	
151.000									.1681						
156.000								.5212							
162.000									.2283						
165.000										-.9634	-.9433	-.1899	.0318	.0085	
169.000								.6154							
174.000							.7764								
180.000	1.2154	.5739	.3391	.2576	.2007	.2640		.5928		-1.0244	-1.0742	-.1658	.0299	.0081	
305.000			.3124	.1314	.0771	-.0648		-.3634		-.2674					
320.000			.2640	.0984	.0829	-.0058		-.4756		-.2629	-.3056	-.1374	-.0052	.0557	.1047
340.000			.2386	.0896	.0909	.2388		-.4417		-.2461					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1131	.1388	.1790	-.0926	-.3006	-.2938	-.2712		-.2453	-.2338					
40.000	.0827	.1038	.0893	-.1898	-.3534	-.2620	-.2594		-.2384	-.2323					
70.000	-.1676	-.2636	-.0851	.0535	-.2296	-.1216	-.1349								
90.000	-.1139	-.1868	-.0061	.0763	-.3192	-.1686	-.1627								
105.000			.0654	.1101	-.4522	-.2096	-.2019								
110.000								-.2409							
120.000	-.0538	-.0399	.1376	.2212	-.5142	-.3025	-.2728	-.2162							
135.000			.2134	.4043	-.4035	-.2789	-.2698								
150.000	-.0212	.0350	.2399	.4358	-.3143	-.2895	-.2763								
165.000	-.0147		.2449		-.1189	-.2823	-.2173								
180.000	-.0098	.0551	.2483	.4647											
320.000	.0947	.1399	.1617	-.1202	-.3166	-.2728	-.2439								

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## IABIA - PRESSURE SOURCE DATA TABULATION

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ARC11-019 IAB1 LVAP(ELHL SEALED) ORB, FUSELAGE

(RETB26)

ALPHA0(4) = .084 BETA0(4) = 4.101

## SECTION (1) ORBITER FUSELAGE

## DEPENDENT VARIABLE CP

X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.1851	.6027	.1587	.0730	.0522	.7500		-.4654		-.2833	-.2432	-.1868	-.0677	.0235	.0664
20.000			.1344	.0342	.0078	.1024		-.4234		-.2867					
40.000			.1579	-.0050	-.0357	-.1172		-.3844		-.2822	-.3209	-.1507	-.0487	.0375	.0721
55.000			.1714	-.0260	-.0876	-.1703		-.5266		-.2626					
70.000			.1822	-.0340	-.1232	-.1350		-.4011		-.4116	-.8523	-.2499	-.0230	.0326	
90.000		.2957	.2189	-.0084	-.1205	-.1037		-.3288		-.5887	-.6899	-.3912	-.0010	.0311	
120.000			.2722	.0913	-.0265	.0378		-.0894		-.6857	-.9162	-.4817	-.0047	.0197	
140.000										-.9393					
150.000			.2988	.1827	.1024	.1567				-1.0460	-1.0493	-.2601	.0130	-.0057	
151.000									.0397						
156.000								.4136							
162.000									.1236						
165.000										-.9757	-1.0691	-.2040	.0081	-.0137	
169.000								.5520							
174.000							.7330								
180.000	1.1851	.5289	.3289	.2441	.1789	.2370		.5615		-1.1221	-.9333	-.2302	.0186	-.016	
305.000			.4675	.2638	.1839	.0309		-.2536		-.2038					
320.000			.3354	.1506	.1143	.0627		-.4898		-.2233	-.4074	-.1067	.0073	.0675	.1517
340.000			.2494	.0934	.0828	.2982		-.3958		-.2566					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1018	.1781	.2920	.0391	-.3409	-.3152	-.3287		-.2637	-.2408					
40.000	.1098	.2081	.3252	.0433	-.3227	-.2936	-.2948		-.2808	-.2728					
70.000	-.1455	-.2092	-.1097	-.0106	-.3367	-.3527	-.1932								
90.000	-.0887	-.1398	-.0346	.0129	-.4182	-.4345	-.2356								
105.000			.0252	.0387	-.5462	-.5242	-.2455								
110.000								-.2586							
120.000	-.0394	-.0399	.0855	.0635	-.6469	-.6488	-.3588	-.2332							
135.000			.1827	.3103	-.5439	-.5527	-.5470								
150.000	-.0204	.0264	.2051	.4314	-.4117	-.5157	-.4134								
165.000	-.0288		.2176		-.2092	-.4542	-.2358								
180.000	-.0307	.0473	.2392	.3803											
320.000	.0751	.1030	.1058	-.4807	-.3762	-.3027	-.2920								

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## IABIA - PRESSURE SOURCE DATA TABULATION

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ARC11-019 IAB1 LVAP(ELHL SEALED) ORB. FUSELAGE

(RET826)

ALPHA0( 4) = .089 BETA0 ( 5) = 6.149

SECTION ( 1) ORBITER FUSELAGE				DEPENDENT VARIABLE CP											
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.1553	.5936	.1421	.0605	.0265	.6569		-.4458		-.3418	-.2796	-.2418	-.0948	-.0183	.0352
20.000			.0949	.0003	-.0255	.0465		-.4164		-.3411					
40.000			.0868	-.0485	-.0869	-.1755		-.4386		-.3147	-.3214	-.1751	-.0786	.0168	.0698
55.000			.0938	-.0876	-.1452	-.2115		-.5787		-.3090					
70.000			.1081	-.0951	-.1763	-.1761		-.4442		-.4432	-.6160	-.3400	-.0492	.0334	
90.000		.1867	.1444	-.0743	-.1847	-.1558		-.3689		-.6543	-.5186	-.4857	-.0409	.0364	
120.000			.2008	.0321	-.0888	-.0188		-.1502		-.7508	-.5722	-.5215	-.0583	.0187	
140.000										-1.0048					
150.000			.2418	.1465	.0561	.1136				-1.0630	-1.0634	-.3091	-.0398	-.0171	
151.000									-.0395						
156.000								.3525							
162.000									.0649						
165.000										-.9447	-1.0729	-.2266	-.0319	-.0289	
169.000								.5189							
174.000						.6550									
180.000	1.1553	.4874	.3033	.2115	.1570	.2184		.5280		-1.1284	-.9294	-.2639	-.0175	-.0369	
305.000			.5464	.3312	.2480	.0837		-.1411		-.1495					
320.000			.3786	.1724	.1371	.0769		-.4036		-.1902	-.4725	-.0917	.0096	.0755	.1643
340.000			.2604	.0909	.0752	.2999		-.3622		-.2556					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.0785	.1672	.3032	.0420	-.3376	-.3099	-.3232		-.2657	-.2338					
40.000	.1263	.2348	.3658	.1107	-.3539	-.2917	-.3020		-.2880	-.2751					
70.000	-.1215	-.1915	-.1230	-.0370	-.3592	-.3570	-.2294								
90.000	-.0798	-.1258	-.0555	-.0214	-.4331	-.4370	-.2625								
105.000			.0040	.0181	-.5627	-.5349	-.2796								
110.000								-.2502							
120.000	-.0445	-.0335	.0590	.0663	-.6923	-.7016	-.5065	-.2300							
135.000			.1438	.2793	-.5743	-.6139	-.6179								
150.000	-.0346	.0279	.1901	.3362	-.4620	-.5964	-.4457								
165.000	-.0437		.2087		-.2447	-.5117	-.2449								
180.000	-.0540	.0404	.2360	.3396											
320.000	.0695	.1246	.1255	-.4494	-.3668	-.3077	-.2962								



ARC11-019 IAB1 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB26)

ALPHA0( 5) = 2.165 BETA0 ( 1) = -6.124

## SECTION ( 1) ORBITER FUSELAGE

## DEPENDENT VARIABLE CP

X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.1685	.6451	.1894	.0955	.0784	.7718		-.4145		-.2635	-.2446	-.1396	-.0500	.0874	.1541
20.000			.2729	.1444	.0996	.3342		-.3147		-.2477					
40.000			.4769	.2290	.1501	.1044		-.3821		-.2402	-.2511	-.0878	.0047	.1195	.1978
55.000			.5790	.3458	.2332	.0971		-.1238		-.1611					
70.000			.5894	.3489	.2138	.1205		-.0580		-.1637	-.5682	-.1590	-.0293	.0462	
90.000		.7768	.5763	.3485	.2089	.1542		-.0034		-.1528	-.6413	-.2430	-.0410	.0296	
120.000			.5040	.3189	.1948	.2231		.2214		-.2378	-.6185	-.6371	-.1410	-.0889	
140.000										-.3166					
150.000			.3757	.2165	.1638	.2216				-.3904	-1.1111	-.5000	-.0323	-.0482	
151.000									.3005						
156.000								.6193							
162.000									.3144						
165.000										-.9817	-1.0384	-.4868	-.0179	-.0418	
169.000								.6284							
174.000							.7809								
180.000	1.1685	.5160	.2392	.1683	.1266	.1879		.4654		-1.1271	-.9554	-.4291	.0092	-.0315	
305.000			.0638	-.0513	-.0783	-.2062		-.5218		-.3040					
320.000			.1292	-.0047	-.0067	-.1751		-.3648		-.3071	-.3105	-.1992	-.0648	.0262	.1055
340.000			.1960	.0442	.0650	.1078		-.3388		-.2861					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1761	.2745	.4768	.0600	-.3332	-.2911	-.2834		-.2441	-.2305					
40.000	.1070	.1268	.1929	-.2878	-.4409	-.2691	-.2526		-.2381	-.2229					
70.000	-.2142	-.4173	-.0569	.1625	.0089	.0028	-.0470								
90.000	-.1724	-.3391	.0251	.2058	-.0416	-.0484	-.0930								
105.000			.1075	.2544	-.1432	-.0950	-.1314								
110.000								-.2481							
120.000	-.2210	-.1594	.2529	.2315	-.2490	-.1664	-.1519	-.2104							
135.000			.3037	.2364	-.2445	-.1405	-.1842								
150.000	-.1151	-.0004	.2863	.1791	-.1963	-.1135	-.2028								
165.000	-.0870		.2460		.0900	-.0573	-.2241								
180.000	-.0710	.0281	.2107	.2315											
320.000	.1872	.2988	.4074	.1048	-.3385	-.3066	-.2454								

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PAGE 435

ARC11-019 IAB1 LVAP(ELHL SEALED) ORB. FUSELAGE

(RET826)

ALPHA( 5) = 2.174 BETA( 2) = -2.053

SECTION ( 1) ORBITER FUSELAGE		DEPENDENT VARIABLE CP													
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.2091	.6694	.1976	.1045	.0850	.7219		-.4391		-.2241	-.1926	-.1142	-.0166	.0755	.1255
20.000			.2381	.1185	.0808	.2746		-.3527		-.2226					
40.000			.3644	.1505	.0835	.0338		-.4572		-.2117	-.3094	-.1119	-.0016	.0883	.1558
55.000			.4199	.1936	.0982	-.0097		-.2943		-.2466					
70.000			.4257	.1890	.0688	.0068		-.1942		-.2567	-.7294	-.2068	-.0309	.0308	
90.000		.6002	.4295	.2053	.0722	.0411		-.1264		-.2784	-.7523	-.2630	-.0256	.0236	
120.000			.4141	.2358	.1176	.1666		.1197		-.3898	-.7029	-.4114	-.0508	-.0125	
140.000										-.4879					
150.000			.3521	.2140	.1507	.2105				-.8712	-1.0960	-.4659	-.0034	.0039	
151.000									.2162						
156.000								.5639							
162.000									.2575						
165.000										-.9812	-.9423	-.4508	.0330	.0092	
169.000								.6213							
174.000						.7938									
180.000	1.2091	.5282	.2758	.2002	.1557	.2192		.5587		-1.1002	-1.0850	-.3145	.0172	.0088	
305.000			.2308	.0680	.0250	-.1130		-.3815		-.2673					
320.000			.2336	.0737	.0620	-.0451		-.2863		-.2593	-.2683	-.1687	-.0185	.0561	.1082
340.000			.2415	.0782	.0871	.2048		-.3696		-.2476					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1464	.1984	.3246	-.0554	-.3367	-.2989	-.2987			-.2429	-.2447				
40.000	.1063	.1053	.0857	-.4032	-.3662	-.2653	-.2616			-.2379	-.2319				
70.000	-.2021	-.3732	-.1113	.0657	-.1160	-.0859	-.0996								
90.000	-.1565	-.2938	-.0111	.0797	-.1952	-.1342	-.1348								
105.000			.0845	.1002	-.3209	-.1841	-.1742								
110.000								-.2463							
120.000	-.1213	-.1018	.1832	.1217	-.4719	-.2666	-.2247	-.2118							
135.000			.2334	.3006	-.4164	-.2317	-.2425								
150.000	-.0607	-.0013	.2160	.3621	-.2963	-.2325	-.2509								
165.000	-.0483		.2016		-.0847	-.2173	-.2221								
180.000	-.0426	.0195	.1978	.4190											
320.000	.1341	.2308	.3235	.0108	-.3291	-.2631	-.2433								

ARC11-019 IA81 LVAP(ELHL SEALED) ORB. FUSELAGE

(RET826)

ALPHA0 ( 5 ) = 2.176 BETA0 ( 3 ) = 2.058

## SECTION ( 1 ) ORBITER FUSELAGE

## DEPENDENT VARIABLE CP

X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.1993	.6577	.1926	.1013	.0759	.7704		-.4512		-.2167	-.1805	-.1271	-.0239	.0582	.1053
20.000			.1853	.0819	.0504	.1693		-.4048		-.2291					
40.000			.2404	.0678	.0143	-.0473		-.2553		-.2401	-.2748	-.1371	-.0152	.0639	.1122
55.000			.2571	.0580	-.0245	-.1219		-.3675		-.2900					
70.000			.2606	.0466	-.0587	-.0928		-.3199		-.3407	-.8138	-.1818	-.0212	.0166	
90.000		.3932	.2823	.0637	-.0610	-.0581		-.2492		-.4012	-.8494	-.2334	-.0042	.0166	
120.000			.3060	.1339	.0164	.0757		-.0011		-.5788	-.8226	-.4059	.0192	.0067	
140.000										-.7411					
150.000			.2959	.1787	.1040	.1645				-1.0103	-1.0650	-.4290	.0446	.0032	
151.000									.0949						
156.000								.4645							
162.000									.1618						
165.000										-1.0046	-1.0237	-.2936	.0257	.0032	
169.000								.5778							
174.000							.7429								
180.000	1.1993	.5018	.2854	.2075	.1543	.2149		.5695		-1.1261	-1.0367	-.2671	.0230	-.0006	
305.000			.3933	.2082	.1386	-.0155		-.2266		-.2126					
320.000			.3234	.1383	.1178	.0318		-.4227		-.2187	-.2766	-.1033	.0120	.0722	.1530
340.000			.2687	.1033	.1013	.2680		-.3085		-.2313					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1286	.1627	.2316	-.0161	-.3019	-.3053	-.3014		-.2533	-.2228					
40.000	.1206	.1825	.2735	-.0215	-.2943	-.2763	-.2625		-.2602	-.2506					
70.000	-.2011	-.3177	-.1295	.0048	-.2817	-.1587	-.1406								
90.000	-.1487	-.2315	-.0485	.0231	-.3745	-.2226	-.1707								
105.000			.0200	.0593	-.5068	-.2485	-.2057								
110.000								-.2495							
120.000	-.0792	-.0835	.0805	.1750	-.5713	-.5458	-.2770	-.2273							
135.000			.1728	.3400	-.4800	-.4642	-.2728								
150.000	-.0479	.0063	.2014	.3773	-.3947	-.4535	-.2663								
165.000	-.0418		.2003		-.1891	-.4085	-.2144								
180.000	-.0434	.0227	.2033	.4286											
320.000	.1013	.1117	.0856	-.3441	-.3448	-.2911	-.2796								

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## IABIA - PRESSURE SOURCE DATA TABULATION

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ARC11-019 IAB1 LVAP(ELHL SEALED) ORB. FUSELAGE

(RET826)

ALPHA0( 5) = 2.176 BETA0( 4) = 6.147

SECTION ( 1) ORBITER FUSELAGE		DEPENDENT VARIABLE CP													
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.1407	.6139	.1551	.0618	.0243	.6422		-.4391		-.3200	-.2707	-.2294	-.0875	-.0081	.0434
20.000			.1069	-.0020	-.0276	.0281		-.4423		-.3105					
40.000			.0925	-.0495	-.0872	-.1949		-.3622		-.2913	-.3118	-.1681	-.0697	.0291	.0866
55.000			.0851	-.0900	-.1476	-.2324		-.4605		-.3117					
70.000			.0925	-.1007	-.1850	-.1881		-.4491		-.3814	-.8679	-.2628	-.0431	.0170	
90.000		.1569	.1255	-.0843	-.1903	-.1576		-.3694		-.4903	-.5224	-.4269	-.0073	.0200	
120.000			.1757	.0029	-.1141	-.0276		-.1431		-.7556	-.6923	-.4558	-.0119	.0124	
140.000										-1.0247					
150.000			.2045	.1027	.0153	.0879				-1.1107	-1.1060	-.3118	-.0058	-.0221	
151.000									-.0531						
156.000								.3371							
162.000									.0425						
165.000										-1.0224	-1.1118	-.2692	-.0054	-.0321	
169.000								.4962							
174.000							.6333								
180.000	1.1407	.4257	.2497	.1649	.1077	.1844		.4985		-1.1695	-.9768	-.3908	.0045	-.0420	
305.000			.5587	.3471	.2526	.0867		-.1048		-.1245					
320.000			.3991	.1931	.1452	.0774		-.2673		-.1740	-.3387	-.0716	.0193	.0866	.1785
340.000			.2718	.0980	.0776	.2925		-.2684		-.2496					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.0858	.1768	.3041	.0399	-.3134	-.3031	-.3032		-.2511	-.2181					
40.000	.1383	.2391	.3569	.1049	-.3390	-.2710	-.2852		-.2736	-.2664					
70.000	-.1718	-.2420	-.1580	-.0538	-.3765	-.2951	-.2036								
90.000	-.1177	-.1751	-.0879	-.0316	-.4576	-.3623	-.2297								
105.000			-.0244	.0127	-.5873	-.4854	-.2385								
110.000								-.2490							
120.000	-.0611	-.0638	.0304	.0979	-.6955	-.7131	-.2815	-.2245							
135.000			.1236	.3167	-.5809	-.6284	-.4345								
150.000	-.0508	.0078	.1653	.2876	-.4770	-.6166	-.4211								
165.000	-.0638		.1871		-.2829	-.5407	-.2375								
180.000	-.0756	.0250	.2120	.2704											
320.000	.0899	.1372	.1378	-.4664	-.3608	-.3029	-.2668								

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OF POOR QUALITY

ARC11-019 IAB1 LVAP(ELHL SEALED) ORB. FUSELAGE

(RET826)

ALPHA0 (6) = 4.242 BETA0 (1) = -6.110

## SECTION (1) ORBITER FUSELAGE

## DEPENDENT VARIABLE CP

X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.1598	.6377	.2082	.1012	.0808	.7638		-.4147		-.2569	-.2389	-.1372	-.0514	.0962	.1606
20.000			.2932	.1529	.1016	.3295		-.2918		-.2427					
40.000			.4984	.2461	.1623	.0990		-.3552		-.2227	-.2198	-.0736	.0095	.1320	.2078
55.000			.5931	.3571	.2395	.0902		-.0998		-.1415					
70.000			.5880	.3449	.2092	.1128		-.0484		-.1505	-.5503	-.1764	-.0522	.0377	
90.000		.7631	.5618	.3347	.1922	.1430		.0002		-.1423	-.6454	-.2504	-.0677	.0208	
120.000			.4679	.2776	.1559	.1874		.2092		-.2434	-.6313	-.6155	-.2145	-.1342	
140.000										-.3343					
150.000			.3222	.1605	.1109	.1832			.2894	-.4249	-.8350	-.5346	-.1203	-.0572	
151.000															
156.000								.6062							
162.000									.3003						
165.000										-1.0273	-.7417	-.5376	-.0916	-.0488	
169.000								.6092							
174.000							.7639								
180.000	1.1598	.4572	.1870	.1232	.0829	.1534		.4439		-1.1629	-.8430	-.5232	-.0501	-.0335	
305.000			.0595	-.0602	-.0880	-.2206		-.4238		-.3095					
320.000			.1358	-.0075	-.0093	-.1865		-.3521		-.3095	-.3036	-.2098	-.0565	.0296	.1134
340.000			.2054	.0486	.0641	.1017		-.3393		-.2916					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1811	.2753	.4717	.0616	-.3428	-.2943	-.2956		-.2410	-.2345					
40.000	.1172	.1365	.1967	-.2979	-.4447	-.2781	-.2617		-.2364	-.2307					
70.000	-.2448	-.4064	-.0936	.1462	-.0068	-.0106	-.0586								
90.000	-.2057	-.4159	-.0086	.1907	-.0581	-.0681	-.1062								
105.000			.0729	.2225	-.1585	-.1242	-.1436								
110.000								-.2381							
120.000	-.2865	-.2235	.2130	.1674	-.2799	-.1878	-.1606	-.2134							
135.000			.2503	.1495	-.2943	-.1657	-.2020								
150.000	-.1382	-.0136	.2385	.0913	-.2371	-.1352	-.2069								
165.000	-.1071		.2070		.0747	-.0822	-.2217								
180.000	-.0930	.0051	.1842	.1666											
320.000	.2029	.2961	.4029	.0921	-.3421	-.3071	-.2415								

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ARC11-019 IAB1 LVAP(ELHL SEALED) ORB. FUSELAGE

(RET826)

ALPHA0 ( 6 ) = 4.246 BETA0 ( 2 ) = -4.074

SECTION ( 1 ) ORBITER FUSELAGE				DEPENDENT VARIABLE CP											
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.1882	.6889	.2149	.1108	.0919	.7715		-.3984		-.2293	-.1973	-.1145	-.0259	.0881	.1609
20.000			.2828	.1486	.0994	.3118		-.3022		-.2233					
40.000			.4452	.2107	.1305	.0724		-.3924		-.2075	-.2402	-.0852	.0110	.1189	.1965
55.000			.5119	.2822	.1725	.0342		-.1779		-.1812					
70.000			.5080	.2720	.1396	.0594		-.1069		-.1925	-.6324	-.1870	-.0488	.0320	
90.000		.6743	.4918	.2656	.1312	.0926		-.0513		-.1854	-.6951	-.2587	-.0597	.0204	
120.000			.4293	.2459	.1285	.1716		.1738		-.3005	-.6678	-.4396	-.1496	-.0729	
140.000										-.3940					
150.000			.3229	.1740	.1220	.1888				-.5948	-.8421	-.5175	-.0631	-.0229	
151.000									.2530						
156.000								.5878							
162.000									.2771						
165.000										-1.0103	-.6993	-.5190	-.0541	-.0123	
169.000								.6144							
174.000							.7809								
180.000	1.1882	.4772	.2130	.1475	.1064	.1774		.5017		-1.1322	-.8546	-.4449	-.0052	.0006	
305.000			.1524	.0113	-.0204	-.1678		-.4382		-.2812					
320.000			.1978	.0465	.0422	-.1014		-.2819		-.2702	-.2584	-.1707	-.0353	.0597	.1181
340.000			.2391	.0707	.0857	.1568		-.2921		-.2618					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1908	.2735	.4609	.0592	-.3330	-.2940	-.2899			-.2396	-.2328				
40.000	.1279	.1378	.1845	-.3445	-.4241	-.2623	-.2576			-.2294	-.2245				
70.000	-.2382	-.4675	-.1112	.1046	-.0528	-.0464	-.0726								
90.000	-.1954	-.3944	-.0166	.1209	-.1050	-.0997	-.1181								
105.000			.0917	.1311	-.2124	-.1462	-.1617								
110.000															
120.000	-.2121	-.1787	.2008	.1166	-.3485	-.2239	-.1875			-.2337					
135.000			.2356	.1862	-.3492	-.1966	-.2167			-.2042					
150.000	-.1040	-.0170	.2262	.1654	-.2672	-.1719	-.2235								
165.000	-.0874		.1932		-.0135	-.1442	-.2189								
180.000	-.0733	.0016	.1633	.3366											
320.000	.1870	.2902	.3856	.0648	-.3315	-.2952	-.2387								

ARC11-019 IAB1 LVAP(ELHL SEALED) ORB. FUSELAGE

(RET826)

ALPHA0 ( 6 ) = 4.244 BETA0 ( 3 ) = .001

SECTION ( 1 )	CRBITER FUSELAGE							DEPENDENT VARIABLE CP							
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.2001	.6925	.2180	.1126	.0888	.6180		-.4112		-.2106	-.1673	-.1012	-.0044	.0829	.1284
20.000			.2338	.1085	.0687	.2210		-.3759		-.2099					
40.000			.3171	.1187	.0544	-.0143		-.3143		-.2155	-.2555	-.1145	-.0014	.0878	.1488
55.000			.3461	.1331	.0366	-.0727		-.2876		-.2501					
70.000			.3410	.1153	-.0001	-.0483		-.2377		-.2846	-.7513	-.2008	-.0458	.0159	
90.000		.4788	.3441	.1187	-.0032	-.0143		-.1712		-.3196	-.7920	-.2484	-.0353	.0159	
120.000			.3310	.1554	.0453	.1026		.0692		-.4686	-.7654	-.3937	-.0451	-.0055	
140.000										-.5914					
150.000			.2851	.1580	.0915	.1634				-.9508	-.6909	-.4998	-.0123	.0072	
151.000									.1525						
156.000								.5089							
162.000									.1976						
165.000										-1.0184	-.8672	-.4784	.0095	.0151	
169.000								.5867							
174.000						.7471									
180.000	1.2001	.4672	.2400	.1690	.1160	.2012		.5578		-1.1575	-.9610	-.3797	-.0059	.0106	
305.000			.3237	.1429	.0820	-.0701		-.2527		-.2331					
320.000			.3018	.1206	.0957	-.0059		-.1896		-.2319	-.2452	-.1294	.0118	.0769	.1401
340.000			.2708	.1047	.0996	.2356		-.2963		-.2319					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1443	.1560	.1763	-.0977	-.3327	-.2983	-.2744		-.2265	-.2265					
40.000	.1235	.1363	.1175	-.1530	-.3649	-.2749	-.2604		-.2337	-.2129					
70.000	-.2322	-.4182	-.1507	.0312	-.1716	-.1141	-.1185								
90.000	-.1811	-.3364	-.0556	.0444	-.2639	-.1614	-.1496								
105.000			.0312	.0588	-.3826	-.2072	-.1872								
110.000								-.2407							
120.000	-.1235	-.1344	.0990	.1525	-.5116	-.2979	-.2463	-.2035							
135.000			.1486	.3385	-.4480	-.2714	-.2611								
150.000	-.0697	-.0283	.1672	.3964	-.3418	-.2918	-.2661								
165.000	-.0565		.1706		-.1527	-.2911	-.2046								
180.000	-.0523	-.0045	.1774	.3737											
320.000	.1318	.1630	.1744	-.0983	-.3112	-.2695	-.2334								

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ARC11-019 IAB1 LVAP(ELHL SEALED) ORB. FUSELAGE

(RET026)

ALPHA0 ( 6 ) = 4.243 BETA0 ( 4 ) = 4.105

SECTION ( 1 ) ORBITER FUSELAGE				DEPENDENT VARIABLE CP												
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740	
PHI																
.000	1.1674	.6544	.1867	.0794	.0526	.7393		-.4385		-.2520	-.2149	-.1602	-.0543	.0409	.0925	
20.000			.1603	.0405	.0084	.0914		-.3844		-.2527						
40.000			.1723	.0115	-.0339	-.1309		-.2757		-.2425	-.2770	-.1571	-.0383	.0594	.1040	
55.000			.1708	-.0263	-.0868	-.1910		-.3969		-.2754						
70.000			.1688	-.0382	-.1299	-.1452		-.3768		-.3506	-.8258	-.1843	-.0414	.0117		
90.000		.2556	.1871	-.0305	-.1367	-.1080		-.3101		-.4254	-.8835	-.2409	-.0148	.0140		
120.000			.2169	.0424	-.0650	.0150		-.0700		-.6511	-.8763	-.4203	.0091	.0064		
140.000										-.9123						
150.000			.2231	.1054	.0317	.1084				-1.0942	-.9443	-.4571	.0167	-.0014		
151.000									.0220							
156.000								.3969								
162.000									.0919							
165.000										-1.0433	-.9129	-.3649	.0053	-.0068		
169.000								.5215								
174.000							.6876									
180.000	1.1674	.4219	.2340	.1535	.0914	.1741		.5268		-1.1781	-.9588	-.4351	.0167	-.0152		
305.000			.4926	.2861	.1985	.0366		-.1514		-.1644						
320.000			.3791	.1787	.1368	.0623		-.3200		-.1912	-.2286	-.0857	.0250	.0921	.1796	
340.000			.2799	.1086	.0856	.2883		-.2860		-.2410						
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450						
PHI																
.000	.1254	.2028	.3066	.0455	-.3110	-.3027	-.3121			-.2585	-.2253					
40.000	.1471	.2321	.3330	.0516	-.3289	-.2563	-.2850			-.2692	-.2612					
70.000	-.2260	-.3375	-.1859	-.0410	-.3415	-.1863	-.1657									
90.000	-.1588	-.2583	-.1037	-.0208	-.4326	-.2407	-.1913									
105.000			-.0365	.0135	-.5642	-.2844	-.2181									
110.000								-.2496								
120.000	-.0902	-.1160	.0285	.1306	-.6207	-.6336	-.2725	-.2221								
135.000			.1344	.3056	-.5348	-.5663	-.2565									
150.000	-.0597	-.0227	.1496	.3914	-.4396	-.5418	-.2679									
165.000	-.0616		.1553		-.2589	-.4956	-.2069									
180.000	-.0742	-.0074	.1774	.3132												
320.000	.1106	.1381	.1336	-.4864	-.3636	-.2964	-.2881									

ORIGINAL PAGE IS  
OF POOR QUALITY



ARC11-019 IA81 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB26)

ALPHA0 ( 6 ) = 4.240 BETA0 ( 5 ) = 5.155

## SECTION ( 1 ) ORBITER FUSELAGE

## DEPENDENT VARIABLE CP

X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2140	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.1364	.6408	.1720	.0700	.0237	.6346		-.4351		-.3125	-.2571	-.2266	-.0978	.0037	.0552
20.000			.1178	.0043	-.0207	.0301		-.4336		-.2895					
40.000			.1004	-.0397	-.0856	-.1983		-.3378		-.2703	-.3047	-.1832	-.0623	.0400	.0997
55.000			.0818	-.0925	-.1543	-.2463		-.4781		-.2880					
70.000			.0884	-.1114	-.1912	-.1941		-.4397		-.3574	-.8529	-.2563	-.0503	.0124	
90.000		.1368	.1174	-.0955	-.1965	-.1565		-.3559		-.4329	-.6472	-.4270	-.0121	.0162	
120.000			.1480	-.0165	-.1273	-.0314		-.1296		-.7326	-.8472	-.4693	-.0084	.0188	
140.000										-1.0050					
150.000			.1646	.0662	-.0114	.0658				-1.1166	-1.1254	-.3432	-.0001	-.0049	
151.000									-.0496						
156.000								.3363							
162.000									.0360						
165.000										-1.0358	-1.1181	-.3689	.0045	-.0159	
169.000								.4890							
174.000							.6246								
180.000	1.1364	.3737	.2045	.1239	.0658	.1506		.4822		-1.1711	-.9131	-.5093	-.0499	-.0338	
305.000			.5796	.3620	.2654	.0968		-.0934		-.1058					
320.000			.4307	.2128	.1613	.0838		-.2707		-.1615	-.2956	-.0650	.0294	.1027	.1925
340.000			.2963	.1057	.0784	.2945		-.2699		-.2338					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.0974	.1807	.3073	.0339	-.3143	-.3014	-.3104		-.2513	-.2243					
40.000	.1601	.2465	.3571	.1092	-.3576	-.2664	-.2948		-.2764	-.2669					
70.000	-.2072	-.2988	-.1874	-.0657	-.3724	-.2786	-.1894								
90.000	-.1490	-.2205	-.1090	-.0360	-.4597	-.3712	-.2183								
105.000			-.0433	.0229	-.5851	-.4556	-.2324								
110.000								-.2453							
120.000	-.0779	-.0866	.0180	.1126	-.6793	-.7005	-.2674	-.2244							
135.000			.0989	.3580	-.5733	-.6244	-.3500								
150.000	-.0619	-.0113	.1370	.3151	-.4780	-.6099	-.4067								
165.000	-.0790		.1647		-.3127	-.5414	-.2339								
180.000	-.0916	.0119	.1891	.1688											
320.000	.1092	.1522	.1507	-.4700	-.3507	-.3047	-.2826								

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## 1A81A - PRESSURE SOURCE DATA TABULATION

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ARC11-019 1A81 LVAP (ELHL SEALED) ORB. FUSELAGE

(RET826)

ALPHA0 ( 7 ) = 6.337 BETA0 ( 1 ) = -4.058

SECTION ( 1 ) ORBITER FUSELAGE		DEPENDENT VARIABLE CP													
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.1737	.7145	.2344	.1231	.0966	.7737		-.3909		-.2144	-.1753	-.0907	-.0151	.0955	.1663
20.000			.3011	.1606	.1076	.3089		-.2671		-.2092					
40.000			.4692	.2290	.1451	.0709		-.3625		-.1926	-.2000	-.0614	.0218	.1267	.2007
55.000			.5286	.2983	.1836	.0312		-.1513		-.1614					
70.000			.5082	.2752	.1394	.0495		-.1032		-.1814	-.6032	-.1715	-.0674	.0207	
90.000		.6624	.4777	.2582	.1216	.0797		-.0528		-.1716	-.6897	-.2430	-.0783	.0060	
120.000			.3971	.2086	.0927	.1401		.1705		-.2987	-.6848	-.5315	-.2156	-.1200	
140.000										-.4012					
150.000			.2749	.1254	.0782	.1546			.2419	-.5530	-.7129	-.5139	-.1614	-.0315	
151.000								.5753							
156.000									.2603						
162.000										-1.0185	-.7072	-.5718	-.1569	-.0201	
165.000								.5963							
169.000							.7620								
174.000															
180.000	1.1737	.4210	.1669	.1050	.0656	.1424		.4813		-.7083	-.7539	-.6041	-.1370	-.0087	
305.000			.1585	.0149	-.0227	-.1774		-.4043		-.2672					
320.000			.2135	.0603	.0468	-.1086		-.2441		-.2512	-.2296	-.1467	-.0275	.0632	.1291
340.000			.2555	.0879	.0893	.1523		-.2851		-.2425					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1973	.2772	.4590	.0576	-.3445	-.2968	-.2993		-.2375	-.2330					
40.000	.1394	.1538	.1947	-.3602	-.4228	-.2696	-.2565		-.2337	-.2223					
70.000	-.2595	-.5212	-.1163	.0985	-.0782	-.0751	-.0902								
90.000	-.2223	-.4284	-.0223	.1057	-.1239	-.1300	-.1364								
105.000			.0792	.1174	-.2193	-.1701	-.1694								
110.000								-.2292							
120.000	-.2655	-.2098	.1633	.1072	-.3551	-.2448	-.1978	-.2008							
135.000			.1750	.1617	-.3835	-.2190	-.2292								
150.000	-.1235	-.0545	.1636	.1802	-.2855	-.1963	-.2236								
165.000	-.1023		.1333		-.0468	-.1591	-.2145								
180.000	-.0913	-.0375	.1174	.2960											
320.000	.1935	.2799	.3772	.0414	-.3343	-.2990	-.2342								

ARC11-019 IAB1 LVAP(ELHL SEALED) ORB. FUSELAGE

(RET826)

ALPHA0( 7) = 6.337 BETA0 ( 2) = -2.026

SECTION ( 1) ORBITER FUSELAGE		DEPENDENT VARIABLE CP													
X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.1898	.7253	.2348	.1288	.0937	.7360		-.4025		-.1989	-.1430	-.0830	.0111	.0957	.1505
20.000			.2816	.1506	.0949	.2803		-.2814		-.1967					
40.000			.4073	.1906	.1085	.0399		-.3930		-.1978	-.2089	-.0765	.0242	.1074	.1879
55.000			.4424	.2286	.1161	-.0141		-.2298		-.1989					
70.000			.4243	.2041	.0706	-.0063		-.1594		-.2237	-.6884	-.1869	-.0657	.0102	
90.000		.5749	.4073	.1970	.0543	.0285		-.0991		-.2358	-.7428	-.2613	-.0728	.0012	
120.000			.3508	.1785	.0601	.1142		.1307		-.3725	-.7245	-.4618	-.1725	-.0704	
140.000															
150.000			.2631	.1360	.0734	.1464				-.8731	-.7089	-.5322	-.1624	-.0054	
151.000									.1963						
156.000								.5480							
162.000									.2260						
165.000										-1.0257	-.7230	-.5720	-.1480	.0033	
169.000								.5933							
174.000						.7614									
180.000	1.1898	.4285	.1827	.1183	.0798	.1532		.5241		-.6883	-.7310	-.5956	-.1447	.0180	
305.000			.2437	.0854	.0387	-.1279		-.3091		-.2381					
320.000			.2761	.1013	.0836	-.0583		-.2079		-.2221	-.2235	-.1137	.0004	.0784	.1373
340.000			.2810	.1009	.1034	.1892		-.2907		-.2104					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1743	.2157	.3494	-.0516	-.3388	-.2954	-.2856		-.2420	-.2250					
40.000	.1411	.1311	.1156	-.3944	-.3712	-.2764	-.2543		-.2379	-.2164					
70.000	-.2481	-.5016	-.1220	.0645	.1183	-.1180	-.1009								
90.000	-.2151	-.4083	-.0213	.0679	-.1907	-.1680	-.1481								
105.000			.0760	.0895	-.2819	-.1968	-.1802								
110.000								-.2452							
120.000	-.2010	-.1850	.1446	.0637	-.4378	-.2705	-.2262	-.2060							
135.000			.1480	.2242	-.4344	-.2482	-.2478								
150.000	-.1035	-.0836	.1365	.2898	-.3310	-.2471	-.2467								
165.000	-.0875		.1263		-.1048	-.2263	-.2117								
180.000	-.0746	-.0300	.1252	.3301											
320.000	.1645	.2536	.3356	.0158	-.3257	-.2512	-.2296								

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## IABIA - PRESSURE SOURCE DATA TABULATION

PAGE 445

ARC11-019 IAB1 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB26)

ALPHAO ( 7 ) = 6.335 BETA0 ( 3 ) = .015

SECTION ( 1 ) ORBITER FUSELAGE

DEPENDENT VARIABLE CP

X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1860	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.1902	.7196	.2427	.1266	.0998	.6251		-.3967		-.1957	-.1418	-.0762	.0024	.0939	.1320
20.000			.2632	.1304	.0832	.2178		-.3665		-.1927					
40.000			.3402	.1398	.0711	-.0188		-.2832		-.2005	-.2297	-.0981	.0027	.0985	.1578
55.000			.3571	.1421	.0523	-.0836		-.2549		-.2111					
70.000			.3421	.1178	.0017	-.0540		-.2146		-.2598	-.7258	-.1890	-.0799	.0064	
90.000		.4631	.3321	.1118	-.0047	-.0186		-.1565		-.2906	-.7750	-.2478	-.0848	.0012	
120.000			.3028	.1273	.0125	.0859		.0718		-.4626	-.7463	-.3927	-.1329	-.0274	
140.000										-.5935					
150.000			.2470	.1144	.0485	.1381				-.9599	-.7088	-.5285	-.1510	-.0063	
151.000									.1480						
156.000								.5003							
162.000									.1882						
165.000										-1.0299	-.7262	-.5825	-.1487	.0115	
169.000								.5712							
174.000							.7354								
180.000	1.1902	.4089	.1938	.1282	.0753	.1709		.5380		-.7160	-.7137	-.6077	-.1637	.0150	
305.000			.3413	.1640	.0929	-.0681		-.2432		-.2171					
320.000			.3219	.1433	.1109	-.0003		-.1698		-.2194	-.2110	-.1055	.0233	.0814	.1479
340.000			.2919	.1225	.1098	.2403		-.2797		-.2191					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1521	.1653	.1760	-.0885	-.3272	-.2956	-.2788		-.2433	-.2342					
40.000	.1335	.1513	.1320	-.1316	-.3803	-.2680	-.2640		-.2365	-.2270					
70.000	-.2635	-.4826	-.1583	.0422	-.1883	-.1373	-.1351								
90.000	-.2050	-.3831	-.0649	.0391	-.2627	-.2000	-.1674								
105.000			.0250	.0493	-.3727	-.2261	-.2089								
110.000								-.2425							
120.000	-.1494	-.1753	.0618	.0811	-.4747	-.3605	-.2467	-.2062							
135.000			.1124	.2602	-.4380	-.3084	-.2637								
150.000	-.0870	-.0623	.1272	.3141	-.3383	-.3012	-.2637								
165.000	-.0714		.1298		-.1358	-.2841	-.2039								
180.000	-.0665	-.0274	.1298	.3297											
320.000	.1434	.1711	.1808	-.0965	-.3111	-.2826	-.2334								

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## IABIA - PRESSURE SOURCE DATA TABULATION

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ARC11-019 IAB1 LVAP(ELHL SEALED) ORB. FUSELAGE

(RET826)

ALPHA0( 7) = 6.332 BETA0 ( 4) = 2.074

## SECTION ( 1) ORBITER FUSELAGE

## DEPENDENT VARIABLE CP

X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.1831	.7165	.2321	.1206	.0859	.7720		-.4225		-.1871	-.1443	-.1044	-.0077	.0768	.1290
20.000			.2271	.1005	.0593	.1683		-.3598		-.2021					
40.000			.2735	.0979	.0298	-.0540		-.2091		-.2108	-.2299	-.1212	.0009	.0813	.1378
55.000			.2715	.0744	-.0180	-.1355		-.2968		-.2361					
70.000			.2545	.0471	-.0677	-.1015		-.2693		-.2930	-.7677	-.1681	-.0748	-.0021	
90.000		.3635	.2576	.0551	-.0688	-.0655		-.2049		-.3477	-.8252	-.2027	-.0767	.0005	
120.000			.2514	.0877	-.0261	.0471		.0196		-.5316	-.7547	-.3244	-.1048	-.0044	
140.000										-.6861					
150.000			.2163	.1017	.0348	.1145			.0864	-1.0176	-.7002	-.5363	-.1508	.0124	
151.000															
156.000								.4525							
162.000									.1369						
165.000										-.9822	-.7246	-.5902	-.1508	.0174	
169.000								.5516							
174.000							.7159								
180.000	1.1831	.3994	.1946	.1272	.0707	.1555		.5342		-.7093	-.7692	-.5816	-.1493	.0109	
305.000			.4289	.2330	.1587	-.0153		-.1868		-.1721					
320.000			.3736	.1776	.1438	.0398		-.3070		-.1884	-.2035	-.0782	.0375	.0960	.1814
340.000			.3088	.1279	.1155	.2735		-.2715		-.1995					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1606	.1904	.2658	.0123	-.2953	-.3116	-.3085		-.2511	-.2207					
40.000	.1503	.2071	.2946	-.0192	-.3075	-.2741	-.2588		-.2515	-.2321					
70.000	-.2572	-.4457	-.1748	.0044	-.2131	-.1678	-.1357								
90.000	-.2008	-.3510	-.0860	.0040	-.3025	-.2274	-.1745								
105.000			-.0196	.0215	-.4197	-.2585	-.2098								
110.000								-.2442							
120.000	-.1237	-.1497	.0233	.0905	-.5086	-.4061	-.2674	-.2100							
135.000			.0910	.2846	-.4429	-.3742	-.2777								
150.000	-.0773	-.0454	.1153	.3194	-.3515	-.3670	-.2815								
165.000	-.0681		.1198		-.1868	-.3335	-.2070								
180.000	-.0750	-.0302	.1240	.3236											
320.000	.1330	.1436	.1176	-.3488	-.3537	-.2922	-.2853								

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## IABIA - PRESSURE SOURCE DATA TABULATION

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ARC11-019 IAB1 LVAP(ELHL SEALED) ORB. FUSELAGE

(RETB26)

ALPHA0( 7) = 6.327 BETA0( 5) = 4.123

## SECTION ( 1) ORBITER FUSELAGE

## DEPENDENT VARIABLE CP

X/LB	.0000	.0080	.0230	.0460	.0700	.1120	.1580	.1660	.1770	.2040	.2510	.3010	.3780	.4970	.5740
PHI															
.000	1.1620	.6880	.2023	.1055	.0559	.7372		-.4340		-.2338	-.1769	-.1513	-.0375	.0508	.1136
20.000			.1748	.0665	.0205	.1017		-.3638		-.2225					
40.000			.1887	.0381	-.0266	-.1229		-.2298		-.2289	-.2445	-.1509	-.0239	.0643	.1295
55.000			.1744	-.0039	-.0852	-.1935		-.3338		-.2617					
70.000			.1647	-.0270	-.1347	-.1570		-.3135		-.3258	-.8082	-.1802	-.0766	-.0066	
90.000		.2466	.1829	-.0206	-.1457	-.1186		-.2734		-.3974	-.8703	-.2069	-.0660	.0002	
120.000			.1922	.0351	-.0759	.0068		-.0410		-.6058	-.7418	-.3381	-.1191	-.0006	
140.000										-.8575					
150.000			.1798	.0790	.0043	.0832				-1.0663	-.6896	-.5290	-.1391	.0164	
151.000									.0207						
156.000								.3985							
162.000									.0810						
165.000										-.9141	-.7422	-.5553	-.1470	.0160	
169.000								.5212							
174.000							.6536								
180.000	1.1620	.3775	.1848	.1084	.0658	.1407		.5201		-.7588	-.7476	-.5452	-.1561	-.0003	
305.000			.5048	.2997	.2224	.0398		-.1285		-.1356					
320.000			.4126	.2023	.1628	.0617		-.3296		-.1678	-.2046	-.0544	.0360	.1144	.1987
340.000			.3070	.1194	.1040	.2857		-.2806		-.2115					
X/LB	.6520	.7290	.7790	.8210	.8790	.9210	.9600	.9990	1.0140	1.0450					
PHI															
.000	.1435	.2035	.3227	.0446	-.3047	-.3185	-.3130		-.2429	-.2167					
40.000	.1632	.2237	.3333	.0366	-.3172	-.2692	-.2691		-.2440	-.2391					
70.000	-.2474	-.4144	-.1977	-.0454	-.2681	-.2061	-.1589								
90.000	-.1948	-.3206	-.1198	-.0469	-.3493	-.2627	-.1895								
105.000			-.0552	-.0177	-.4759	-.3329	-.2213								
110.000								-.2549							
120.000	-.1096	-.1444	-.0189	.0868	-.5554	-.5175	-.2895	-.2275							
135.000			.0697	.2947	-.4559	-.4342	-.2872								
150.000	-.0705	-.0351	.1035	.3128	-.3941	-.4349	-.2876								
165.000	-.0804		.1092		-.2631	-.4118	-.2138								
180.000	-.0918	-.0204	.1172	.3060											
320.000	.1253	.1623	.1438	-.4620	-.3694	-.2906	-.2895								

ORIGINAL PAGE IS  
OF POOR QUALITY

ARC11-019 IAB1 LVAP(SBHL UNSEALD) LEFT VERTICAL

(RETV01) ( 17 OCT 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 976.0000 IN. XT  
 LREF = 1297.0000 INCHES YMRP = .0000 IN. YT  
 BREF = 1297.0000 INCHES ZMRP = 400.0000 IN. ZT  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

MACH = 1.100 RN/FT = 3.000  
 ELV-18 = .000 ELV-08 = .000  
 RUDDER = .000 SPDBRK = 55.000

BETA0 ( 1 ) = .005 ALPHA0 ( 1 ) = -6.286

## SECTION ( 1 ) LEFT VERTICAL

## DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .6020 .8390 .9250

## X/CV

.000	.7551	.6490	.6388	.7077	.7097
.025	.2426	.0058	-.1214	.0984	.0563
.050	.3871	.2107	.0258	.2219	.1867
.150	.2959	.1498	.1219	.3201	.3155
.300	.1353	.0819	.0000	.3696	.3187
.520	-.0166	-.0352	.4804	.4388	.2904
.685	-.3672	.3649	.5207	.4127	-.3739
.775	-.2324	.2729	.3756	.2319	-.4203
.900		.1947	.2636	-.0057	-.4366

BETA0 ( 1 ) = -.006 ALPHA0 ( 2 ) = -4.148

## SECTION ( 1 ) LEFT VERTICAL

## DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .6020 .8390 .9250

## X/CV

.000	.7355	.6193	.6020	.6727	.6824
.025	.2122	-.0147	-.1475	.0819	.0419
.050	.3613	.1881	-.0118	.2021	.1708
.150	.2772	.1244	.0767	.3033	.3044
.300	.1145	.0554	.0000	.3553	.3086
.520	-.0438	-.0555	.4599	.4278	.2809
.685	-.3572	.3241	.5043	.4075	-.3680
.775	-.2470	.2611	.3628	.2282	-.4344
.900		.1896	.2526	-.0141	-.4421

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IAB1A - PRESSURE SOURCE DATA TABULATION

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ARC11-019 IAB1 LVAP(SBHL UNSEALD) LEFT VERTICAL

(RETV01)

BETA0 ( 1) = -.021 ALPHA0( 3) = -2.025

SECTION ( 1) LEFT VERTICAL DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.7140	.5876	.5549	.6255	.6340
.025	.1643	-.0419	-.1769	.0543	.0266
.050	.3320	.1616	-.0344	.1652	.1524
.150	.2511	.0916	.0412	.2706	.2738
.300	.0870	.0205	.0000	.3234	.2816
.520	-.0744	-.0920	.4263	.3954	.2510
.685	-.3685	.2742	.4707	.3782	-.3616
.775	-.2644	.2231	.3354	.2040	-.4452
.900		.1750	.2287	-.0388	-.4637

BETA0 ( 1) = -.030 ALPHA0( 4) = .092

SECTION ( 1) LEFT VERTICAL DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.6879	.5597	.5247	.5748	.5932
.025	.1119	-.0683	-.1921	.0196	-.0021
.050	.2970	.1327	-.0734	.1169	.1154
.150	.2254	.0726	.0156	.2406	.2467
.300	.0634	.0004	.0000	.2991	.2582
.520	-.0945	-.1089	.3996	.3737	.2272
.685	-.3791	.2219	.4456	.3584	-.3703
.775	-.2641	.1981	.3154	.1919	-.4540
.900		.1549	.2114	-.0493	-.4785

BETA0 ( 1) = -.026 ALPHA0( 5) = 2.226

SECTION ( 1) LEFT VERTICAL DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.6533	.5217	.4728	.5124	.5554
.025	.0638	-.0932	-.2239	-.0141	-.0167
.050	.2522	.1025	-.1369	.0796	.0839
.150	.1886	.0326	-.0186	.2169	.2258
.300	.0324	-.0384	.0000	.2789	.2408
.520	-.1340	-.1406	.3669	.3536	.2054
.685	-.3795	.1786	.4149	.3409	-.3682
.775	-.2607	.1649	.2934	.1784	-.4566
.900		.1401	.1919	-.0621	-.4788

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ARC11-019 IAB1 LVAP(SBHL UNSEALED) LEFT VERTICAL

(RETV01)

BETA0 ( 1 ) = -.018 ALPHA0( 6 ) = 4.337

SECTION ( 1 ) LEFT VERTICAL DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .6020 .8390 .9250

X/CV

.000	.6386	.4835	.4293	.4114	.5095
.025	.0569	-.1200	-.2493	-.1302	-.0450
.050	.2475	.0716	-.1817	-.0244	.0413
.150	.1625	.0045	-.0554	.1820	.1926
.300	-.0002	-.0717	.0000	.2498	.2117
.520	-.1578	-.1709	.3296	.3247	.1784
.685	-.3911	.1365	.3829	.3195	-.3793
.775	-.2840	.1345	.2671	.1586	-.4732
.900		.1069	.1695	-.0816	-.4945

BETA0 ( 1 ) = -.001 ALPHA0( 7 ) = 6.460

SECTION ( 1 ) LEFT VERTICAL DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .6020 .8390 .9250

X/CV

.000	.6432	.4537	.3869	.3412	.4662
.025	.0629	-.1286	-.2674	-.2655	-.0753
.050	.2453	.0441	-.2172	-.1873	.0079
.150	.1518	-.0191	-.0841	.1514	.1645
.300	-.0308	-.1026	.0000	.2206	.1882
.520	-.1856	-.1957	.2830	.2973	.1625
.685	-.4149	.0919	.3477	.3008	-.4245
.775	-.2984	.1116	.2406	.1467	-.4864
.900		.0971	.1459	-.0892	-.5233

BETA0 ( 1 ) = .009 ALPHA0( 8 ) = 8.583

SECTION ( 1 ) LEFT VERTICAL DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .6020 .8390 .9250

X/CV

.000	.6387	.4354	.3427	.2869	.4171
.025	.0875	-.1461	-.2894	-.3046	-.1013
.050	.2491	.0318	-.2509	-.2946	-.0257
.150	.1454	-.0420	-.1186	.0894	.1290
.300	-.0520	-.1339	.0000	.1901	.1570
.520	-.2142	-.2221	.2414	.2674	.1342
.685	-.4411	.0579	.3132	.2764	-.4219
.775	-.3145	.0707	.2136	.1287	-.5002
.900		.0797	.1227	-.1046	-.5222

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## 1A81A - PRESSURE SOURCE DATA TABULATION

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ARC11-019 1A81 LVAP(SBHL SEALED) LEFT VERTICAL

(RETV02) ( 17 OCT 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 976.0000 IN. XT  
 LREF = 1297.0000 INCHES YMRP = .0000 IN. YT  
 BREF = 1297.0000 INCHES ZMRP = 400.0000 IN. ZT  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

MACH = .600 RN/FT = 3.200  
 ELV-1B = .000 ELV-0B = .000  
 RUDDER = .000 SPOBRK = 55.000

BETA0 ( 1 ) = -.006 ALPHA0( 1 ) = -6.155

## SECTION ( 1 ) LEFT VERTICAL

## DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.5550	.5282	.5867	.5588	.5514
.025	-.0239	-.2011	-.1628	-.0784	-.2242
.050	.1399	.0442	.0823	.0755	.0442
.150	.0739	.0204	.0980	.0962	.0831
.300	-.0181	-.0172	.0000	.1306	.0828
.520	-.1811	.1166	.2454	.2237	.0089
.685	-.1895	.1964	.2264	.1117	-.1482
.775	-.1703	.0562	.0368	.0149	-.1346
.900		-.1170	-.1664	-.0811	-.0447

BETA0 ( 1 ) = -.020 ALPHA0( 2 ) = -4.065

## SECTION ( 1 ) LEFT VERTICAL

## DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.5319	.5007	.5643	.5312	.5252
.025	-.0428	-.2164	-.1562	-.0848	-.2076
.050	.1119	.0225	.0752	.0554	.0354
.150	.0583	.0125	.0892	.0872	.0846
.300	-.0373	-.0213	.0000	.1200	.0807
.520	-.1894	.1094	.2317	.2189	.0211
.685	-.1854	.1932	.2148	.1155	-.0979
.775	-.1741	.0593	.0288	.0247	-.1130
.900		-.1156	-.1749	-.0568	-.0127

## ARC11-019 IAB1 LVAP(SBHL SEALED) LEFT VERTICAL

(RETV02)

BETA0 ( 1 ) = -.028 ALPHA0( 3 ) = -1.995

## SECTION ( 1 ) LEFT VERTICAL

## DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.5049	.4719	.5298	.4922	.4848
.025	-.0760	-.2288	-.1738	-.0972	-.2284
.050	.0884	.0038	.0632	.0443	.0209
.150	.0310	-.0081	.0754	.0762	.0681
.300	-.0626	-.0390	.0000	.1071	.0663
.520	-.1990	.1013	.2167	.2012	.0166
.685	-.1929	.1859	.1973	.0992	-.1062
.775	-.1707	.0564	.0116	.0134	-.0930
.900		-.1186	-.1877	-.0649	-.0221

BETA0 ( 1 ) = -.031 ALPHA0( 4 ) = .078

## SECTION ( 1 ) LEFT VERTICAL

## DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.4861	.4473	.5013	.4640	.4510
.025	-.0908	-.2408	-.1697	-.1025	-.2259
.050	.0694	-.0103	.0565	.0154	.0093
.150	.0121	-.0221	.0647	.0641	.0581
.300	-.0727	-.0468	.0000	.0992	.0577
.520	-.2031	.1011	.2017	.1929	.0022
.685	-.1850	.1797	.1835	.0848	-.0925
.775	-.1607	.0561	.0064	.0040	-.0914
.900		-.1118	-.1903	-.0761	-.0164

BETA0 ( 1 ) = -.032 ALPHA0( 5 ) = 2.167

## SECTION ( 1 ) LEFT VERTICAL

## DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.4727	.4259	.4766	.4328	.4309
.025	-.1098	-.2518	-.1855	-.1137	-.2323
.050	.0532	-.0237	.0479	.0095	.0000
.150	.0017	-.0325	.0655	.0612	.0483
.300	-.0790	-.0544	.0000	.0896	.0472
.520	-.2053	.0960	.1919	.1807	.0032
.685	-.1846	.1819	.1758	.0776	-.1024
.775	-.1574	.0583	.0002	-.0022	-.0892
.900		-.1054	-.1937	-.0759	-.0061

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## 1A81A - PRESSURE SOURCE DATA TABULATION

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ARC11-019 1A81 LVAP(SBHL SEALED) LEFT VERTICAL

(RETV02)

BETA0 ( 1 ) = -.026 ALPHAO( 6 ) = 4.242

SECTION ( 1 ) LEFT VERTICAL

DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.4634	.4035	.4499	.4050	.4020
.025	-.1227	-.2609	-.1843	-.1179	-.2202
.050	.0372	-.0339	.0381	.0044	-.0159
.150	-.0136	-.0393	.0603	.0485	.0416
.300	-.0890	-.0576	.0000	.0808	.0416
.520	-.2105	.0957	.1830	.1702	.0059
.685	-.1818	.1795	.1647	.0734	-.0972
.775	-.1525	.0624	-.0050	-.0066	-.0864
.900		-.0966	-.1961	-.0781	-.0035

BETA0 ( 1 ) = -.007 ALPHAO( 7 ) = 6.338

SECTION ( 1 ) LEFT VERTICAL

DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.4424	.3840	.4194	.3803	.3708
.025	-.1372	-.2595	-.1781	-.1186	-.2093
.050	.0291	-.0504	.0270	.0195	-.0270
.150	-.0222	-.0487	.0449	.0402	.0296
.300	-.1025	-.0637	.0000	.0695	.0306
.520	-.2190	.0941	.1722	.1592	-.0134
.685	-.1777	.1769	.1564	.0625	-.0997
.775	-.1488	.0600	-.0149	-.0098	-.0790
.900		-.1032	-.2037	-.0721	-.0037

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## IABIA - PRESSURE SOURCE DATA TABULATION

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ARC11-019 IAB1 LVAP(SBHL SEALED) LEFT VERTICAL

(RETV03) ( 17 OCT 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 976.0000 IN. XT  
 LREF = 1297.0000 INCHES YMRP = .0000 IN. YT  
 BREF = 1297.0000 INCHES ZMRP = 400.0000 IN. ZT  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

MACH = .900 RN/FT = 3.500  
 ELV-18 = .000 ELV-08 = .000  
 RUDDER = .000 SPD8RK = 55.000

BETA0 ( 1 ) = .027 ALPHA0 ( 1 ) = -6.277

## SECTION ( 1 ) LEFT VERTICAL

## DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .6020 .8390 .9250

## X/CV

.000	.5915	.5155	.5988	.5955	.5840
.025	.0533	-.1989	-.1969	-.0419	-.1809
.050	.1962	.0371	.0823	.1048	.0520
.150	.0919	.0006	.1124	.1528	.1374
.300	-.0421	-.0508	.0000	.1947	.1291
.520	-.2047	.1002	.3390	.2895	.0009
.685	-.2198	.2654	.3424	.1528	-.4843
.775	-.1923	.1252	.1815	-.0202	-.5058
.900		.0180	.0298	-.2115	-.4851

BETA0 ( 1 ) = .004 ALPHA0 ( 2 ) = -4.157

## SECTION ( 1 ) LEFT VERTICAL

## DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .6020 .8390 .9250

## X/CV

.000	.5554	.4613	.5624	.5621	.5449
.025	.0124	-.2321	-.2138	-.0492	-.1782
.050	.1630	-.0062	.0622	.0749	.0437
.150	.0535	-.0324	.0914	.1351	.1169
.300	-.0797	-.0704	.0000	.1743	.1059
.520	-.2284	.0941	.3194	.2669	-.0266
.685	-.2114	.2468	.3233	.1319	-.4723
.775	-.1934	.1132	.1628	-.0366	-.4795
.900		.0074	.0127	-.2299	-.4632

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## IABIA - PRESSURE SOURCE DATA TABULATION

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ARC11-019 IAB1 LVAP(SBHL SEALED) LEFT VERTICAL

(RETV03)

BETA0 ( 1 ) = -.020 ALPHA0( 3 ) = -2.045

SECTION ( 1 ) LEFT VERTICAL

DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.5367	.4370	.5346	.5296	.5163
.025	-.0194	-.2801	-.2201	-.0683	-.1838
.050	.1308	-.0342	.0532	.0585	.0465
.150	.0188	-.0652	.0800	.1199	.1068
.300	-.1125	-.0979	.0000	.1642	.0954
.520	-.2397	.0857	.3005	.2540	-.0390
.685	-.2107	.2464	.3062	.1192	-.4509
.775	-.1917	.1190	.1517	-.0457	-.5511
.900		.0140	.0020	-.2338	-.4188

BETA0 ( 1 ) = -.030 ALPHA0( 4 ) = .070

SECTION ( 1 ) LEFT VERTICAL

DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.5152	.4049	.4946	.4946	.4806
.025	-.0588	-.3050	-.2354	-.0749	-.1957
.050	.1033	-.0692	.0287	.0368	.0331
.150	-.0119	-.0906	.0732	.1113	.0888
.300	-.1527	-.1192	.0000	.1503	.0826
.520	-.2597	.0811	.2856	.2392	-.0511
.685	-.2170	.2408	.2884	.1052	-.4089
.775	-.1864	.1103	.1384	-.0542	-.3982
.900		.0127	-.0097	-.2400	-.3677

BETA0 ( 1 ) = -.035 ALPHA0( 5 ) = 2.209

SECTION ( 1 ) LEFT VERTICAL

DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.5035	.3815	.4636	.4652	.4483
.025	-.1032	-.3339	-.2279	-.0788	-.1847
.050	.0650	-.0989	.0197	.0199	.0299
.150	-.0468	-.1208	.0676	.0997	.0787
.300	-.1829	-.1274	.0000	.1377	.0692
.520	-.2630	.0823	.2659	.2173	-.0633
.685	-.2061	.2387	.2666	.0884	-.3533
.775	-.1829	.1106	.1204	-.0602	-.3661
.900		.0213	-.0245	-.2375	-.3109

ARC11-019 IAB1 LVAP(SBHL SEALED) LEFT VERTICAL

(RETV03)

BETAO ( 1 ) = -.028 ALPHA0( 6 ) = 4.323

SECTION ( 1 ) LEFT VERTICAL

DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .6020 .8390 .9250

X/CV

.000	.4554	.3317	.4355	.4327	.4186
.025	-.1151	-.3214	-.2134	-.0780	-.1815
.050	.0451	-.1031	.0189	.0289	.0108
.150	-.0576	-.1155	.0598	.0887	.0634
.300	-.1800	-.1365	.0000	.1282	.0582
.520	-.2650	.0714	.2607	.2028	-.0719
.685	-.2015	.2227	.2548	.0731	-.3025
.775	-.1882	.1123	.1111	-.0691	-.2822
.900		.0199	-.0312	-.2360	-.2360

BETAO ( 1 ) = .066 ALPHA0( 7 ) = 6.247

SECTION ( 1 ) LEFT VERTICAL

DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .6020 .8390 .9250

X/CV

.000	.4038	.2955	.4134	.3975	.3810
.025	-.1043	-.3310	-.2400	-.0882	-.1877
.050	.0248	-.1211	.0061	.0306	-.0079
.150	-.0765	-.1438	.0448	.0781	.0510
.300	-.1909	-.1533	.0000	.1154	.0451
.520	-.2629	.0593	.2472	.1833	-.0840
.685	-.2054	.2061	.2465	.0567	-.2669
.775	-.1890	.1054	.1054	-.0767	-.2778
.900		.0130	-.0366	-.2381	-.2215

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## 1A81A - PRESSURE SOURCE DATA TABULATION

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ARC11-019 1A81 LVAP(SBHL SEALED) LEFT VERTICAL

(RETV04) ( 17 OCT 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 976.0000 IN. XT  
 LREF = 1297.0000 INCHES YMRP = .0000 IN. YT  
 BREF = 1297.0000 INCHES ZMRP = 400.0000 IN. ZT  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

MACH = 1.100 RN/FT = 3.000  
 ELV-18 = .000 ELV-08 = .000  
 RUDDER = .000 SPDBRK = 55.000

BETA0 ( 1 ) = .066 ALPHA0( 1 ) = -4.854

## SECTION ( 1 ) LEFT VERTICAL

## DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.7465	.6381	.6227	.6914	.6932
.025	.2121	-.0036	-.1361	.0812	.0416
.050	.3786	.2003	.0221	.2071	.1856
.150	.2858	.1419	.0996	.3100	.3169
.300	.1254	.0719	.0000	.3674	.3229
.520	-.0297	.0411	.4740	.4734	.2242
.685	-.3692	.2959	.4962	.3600	-.3736
.775	-.2258	.2548	.3619	.2160	-.4035
.900		.1895	.2540	.0028	-.4047

BETA0 ( 1 ) = .066 ALPHA0( 2 ) = -3.849

## SECTION ( 1 ) LEFT VERTICAL

## DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.7324	.6199	.5970	.6651	.6696
.025	.1878	-.0195	-.1554	.0712	.0311
.050	.3594	.1845	-.0101	.1940	.1726
.150	.2692	.1177	.0720	.3022	.3029
.300	.1072	.0478	.0000	.3574	.3116
.520	-.0499	.0206	.4579	.4591	.2127
.685	-.3736	.2672	.4831	.3485	-.3743
.775	-.2420	.2398	.3501	.2052	-.4047
.900		.1826	.2451	-.0083	-.4079

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ARC11-019 1A81 LVAP(SBHL SEALED) LEFT VERTICAL

(RETV04)

BETA0 ( 1 ) = .067 ALPHA0( 3 ) = -1.842

SECTION ( 1 ) LEFT VERTICAL DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.7081	.5872	.5586	.6233	.6284
.025	.1513	-.0438	-.1797	.0481	.0151
.050	.3296	.1601	-.0280	.1523	.1522
.150	.2451	.0922	.0410	.2699	.2780
.300	.0861	.0215	.0000	.3312	.2900
.520	-.0750	-.0108	.4240	.4358	.1873
.685	-.3787	.2260	.4550	.3274	-.3815
.775	-.2524	.2075	.3282	.1878	-.4196
.900		.1635	.2269	-.0265	-.4226

BETA0 ( 1 ) = .067 ALPHA0( 4 ) = .164

SECTION ( 1 ) LEFT VERTICAL DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.6887	.5591	.5199	.5749	.5818
.025	.1053	-.0655	-.2030	.0137	-.0243
.050	.2975	.1356	-.0565	.1109	.1186
.150	.2204	.0720	.0135	.2410	.2511
.300	.0589	-.0025	.0000	.3048	.2644
.520	-.1031	-.0380	.4004	.4081	.1581
.685	-.4058	.1835	.4299	.3018	-.3887
.775	-.2712	.1777	.3062	.1678	-.4272
.900		.1525	.2078	-.0465	-.4341

BETA0 ( 1 ) = .067 ALPHA0( 5 ) = 2.192

SECTION ( 1 ) LEFT VERTICAL DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.6492	.5224	.4749	.5235	.5431
.025	.0559	-.0948	-.2262	-.0148	-.0307
.050	.2553	.1036	-.1070	.0715	.0872
.150	.1865	.0348	-.0183	.2168	.2297
.300	.0323	-.0404	.0000	.2827	.2471
.520	-.1329	-.0806	.3697	.3867	.1383
.685	-.4033	.1478	.4016	.2845	-.3873
.775	-.2590	.1473	.2849	.1562	-.4369
.900		.1296	.1892	-.0606	-.4464

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## IABIA - PRESSURE SOURCE DATA TABULATION

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ARC11-019 IAB1 LVAP(SBHL SEALED) LEFT VERTICAL

(RETV04)

BETA0 ( 1 ) = .066 ALPHA0( 6 ) = 4.200

SECTION ( 1 ) LEFT VERTICAL

DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .6020 .8390 .9250

X/CV

.000	.6382	.4858	.4315	.4340	.5002
.025	.0467	-.1222	-.2488	-.0898	-.0638
.050	.2423	.0686	-.1601	.0086	.0445
.150	.1562	.0086	-.0495	.1835	.1998
.300	-.0064	-.0696	.0000	.2558	.2212
.520	-.1630	-.1127	.3291	.3615	.1134
.685	-.4198	.1160	.3652	.2614	-.3947
.775	-.2766	.1250	.2568	.1381	-.4423
.900		.1006	.1651	-.0790	-.4531

BETA0 ( 1 ) = .066 ALPHA0( 7 ) = 5.218

SECTION ( 1 ) LEFT VERTICAL

DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .6020 .8390 .9250

X/CV

.000	.6402	.4693	.4036	.3998	.4763
.025	.0530	-.1244	-.2681	-.1365	-.0790
.050	.2439	.0627	-.1795	-.0293	.0196
.150	.1540	-.0088	-.0670	.1698	.1815
.300	-.0163	-.0868	.0000	.2414	.2095
.520	-.1747	-.1292	.3084	.3448	.1019
.685	-.4255	.0951	.3496	.2504	-.4015
.775	-.2763	.1143	.2437	.1294	-.4509
.900		.0878	.1530	-.0895	-.4793

ARC11-019 IAB1 LVAP(SBHL SEALED) LEFT VERTICAL

(RETV05) ( 17 OCT 75 )

## REFERENCE DATA

## PARAMETRIC DATA

SREF = 2690.0000 SQ.FT. XMRP = 976.0000 IN. XT  
 LREF = 1297.0000 INCHES YMRP = .0000 IN. YT  
 BREF = 1297.0000 INCHES ZMRP = 400.0000 IN. ZT  
 SCALE = .0300 SCALE

MACH = 1.250 RN/FT = 2.250  
 ELV-18 = .000 ELV-08 = .000  
 RUDDER = .000 SPOBRK = 55.000

BETA0 ( 1 ) = .069 ALPHA0 ( 1 ) = -5.882

## SECTION ( 1 ) LEFT VERTICAL

## DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.7976	.7081	.6778	.6953	.7390
.025	.2156	.0907	-.0293	.1021	.1293
.050	.4235	.2904	.0052	.1268	.1841
.150	.3677	.2249	.1625	.3760	.3958
.300	.2181	.1481	.0000	.4437	.4158
.520	.0519	.1061	.5113	.5614	.3372
.685	-.3470	.3004	.5552	.4631	-.2123
.775	-.2423	.2127	.4371	.3347	-.2831
.900		.2111	.3559	.1299	-.3072

BETA0 ( 1 ) = .070 ALPHA0 ( 2 ) = -3.880

## SECTION ( 1 ) LEFT VERTICAL

## DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.7668	.6735	.6377	.6126	.6914
.025	.1824	.0639	-.0527	-.0087	.0987
.050	.3908	.2589	-.0138	.0101	.1507
.150	.3389	.1929	.1358	.3485	.3671
.300	.1929	.1192	.0000	.4150	.3925
.520	.0231	.0712	.4711	.5357	.3142
.685	-.3513	.2594	.5226	.4429	-.2265
.775	-.2541	.1766	.4100	.3176	-.2888
.900		.1760	.3338	.1121	-.3117

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## IABIA - PRESSURE SOURCE DATA TABULATION

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ARC11-019 IAB1 LVAP(SBHL SEALED) LEFT VERTICAL

(RETV05)

BETA0 ( 1 ) = .070 ALPHA0( 3 ) = -1.873

SECTION ( 1 ) LEFT VERTICAL DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.7343	.6420	.5996	.5619	.6289
.025	.1496	.0361	-.0710	-.0754	.0855
.050	.3589	.2212	-.0344	-.0629	.1115
.150	.3122	.1696	.1094	.2780	.3471
.300	.1693	.0975	.0000	.3936	.3743
.520	.0017	.0449	.4256	.5158	.2983
.685	-.3644	.2269	.4845	.4280	-.2330
.775	-.2483	.1439	.3833	.3105	-.2899
.900		.1445	.3141	.1059	-.2964

BETA0 ( 1 ) = .070 ALPHA0( 4 ) = .113

SECTION ( 1 ) LEFT VERTICAL DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.6982	.6062	.5601	.5159	.5482
.025	.0979	.0140	-.0871	-.1031	.0347
.050	.3200	.1810	-.0577	-.0912	.0404
.150	.2799	.1439	.0844	.1718	.3187
.300	.1418	.0694	.0000	.3590	.3481
.520	-.0175	.0181	.3819	.4841	.2752
.685	-.3900	.1965	.4432	.4037	-.2484
.775	-.2542	.1145	.3443	.2930	-.3000
.900		.1104	.2879	.0885	-.2959

BETA0 ( 1 ) = .070 ALPHA0( 5 ) = 2.177

SECTION ( 1 ) LEFT VERTICAL DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.6451	.5659	.5175	.4683	.4667
.025	.0355	-.0090	-.1120	-.1292	-.0530
.050	.2654	.1474	-.0936	-.1214	-.0455
.150	.2352	.1165	.0514	.0764	.2767
.300	.1115	.0420	.0000	.3259	.3189
.520	-.0437	-.0109	.3394	.4511	.2489
.685	-.3776	.1697	.4017	.3789	-.2499
.775	-.2456	.0889	.3081	.2752	-.2989
.900		.1002	.2624	.0730	-.2852

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## ARC11-019 IA81 LVAP(SBHL SEALED) LEFT VERTICAL

(RETV05)

BETA0 ( 1 ) = .070 ALPHA0( 6 ) = 4.185

SECTION ( 1 ) LEFT VERTICAL DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .6020 .8390 .9250

X/CV

.000	.6425	.5310	.4748	.4181	.4013
.025	.0188	-.0267	-.1314	-.1448	-.1299
.050	.2495	.1055	-.1238	-.1445	-.1111
.150	.2078	.0902	.0254	.0298	.2336
.300	.0833	.0141	.0000	.2876	.2951
.520	-.0715	-.0419	.2964	.4229	.2261
.685	-.3718	.1396	.3624	.3532	-.2535
.775	-.2555	.0655	.2764	.2592	-.2973
.900		.0824	.2379	.0612	-.2760

BETA0 ( 1 ) = .069 ALPHA0( 7 ) = 6.212

SECTION ( 1 ) LEFT VERTICAL DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .6020 .8390 .9250

X/CV

.000	.6444	.5025	.4273	.3683	.3371
.025	.0391	-.0458	-.1460	-.1642	-.1642
.050	.2617	.0751	-.1500	-.1626	-.1395
.150	.1985	.0640	-.0056	-.0031	.1843
.300	.0544	-.0147	.0000	.2496	.2617
.520	-.0961	-.0686	.2549	.3850	.1943
.685	-.3825	.1113	.3238	.3205	-.2600
.775	-.2626	.0358	.2439	.2344	-.3014
.900		.0881	.2063	.0415	-.2867

BETA0 ( 1 ) = .069 ALPHA0( 8 ) = 7.214

SECTION ( 1 ) LEFT VERTICAL DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .6020 .8390 .9250

X/CV

.000	.6503	.4953	.4052	.3445	.3122
.025	.0497	-.0459	-.1524	-.1721	-.1773
.050	.2690	.0720	-.1583	-.1705	-.1511
.150	.1988	.0537	-.0148	-.0138	.1633
.300	.0469	-.0226	.0000	.2279	.2513
.520	-.1028	-.0789	.2419	.3681	.1833
.685	-.3917	.0987	.3085	.3094	-.2613
.775	-.2722	.0240	.2276	.2264	-.3018
.900		.0809	.1935	.0375	-.2850

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## 1A81A - PRESSURE SOURCE DATA TABULATION

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ARC11-019 1A81 LVAP(ELHL UNSEALD) LEFT VERTICAL

(RETV06) ( 17 OCT 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 976.0000 IN. XT  
 LREF = 1297.0000 INCHES YMRP = .0000 IN. YT  
 BREF = 1297.0000 INCHES ZMRP = 400.0000 IN. ZT  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

MACH = .600 RN/FT = 2.250  
 ELV-1B = 8.000 ELV-0B = 4.000  
 AUDDER = .000 SPDBRK = .000

ALPHA0( 1) = -6.048 BETA0( 1) = -.007

## SECTION ( 1) LEFT VERTICAL

## DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.5137	.4727	.5186	.5062	.5153
.025	-.0839	-.2536	-.3059	-.3581	-.3821
.050	.0753	-.0085	-.2020	-.1073	-.2832
.150	.0183	-.0541	-.0914	-.1167	-.1082
.300	-.0944	-.1262	.0000	-.1572	-.1600
.520	-.2610	-.2841	-.3851	-.2925	-.3050
.685	-.2415	-.3204	-.3747	-.3676	-.3192
.775	-.1898	-.2124	-.2259	-.2076	-.1640
.900		-.1428	-.1115	-.0714	-.0441

ALPHA0( 2) = -4.013 BETA0( 1) = -4.061

## SECTION ( 1) LEFT VERTICAL

## DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.3216	.1993	.2536	.3556	.2946
.025	.3017	.2324	.2515	.2448	.1912
.050	.2670	.2009	.2059	.2064	.1773
.150	.1385	.0946	.0972	.0801	.0455
.300	.0036	-.0163	.0000	-.0302	-.0661
.520	-.2021	-.2182	-.2773	-.2004	-.2387
.685	-.2467	-.2866	-.3166	-.3007	-.2407
.775	-.1795	-.2032	-.1986	-.1813	-.1612
.900		-.1530	-.1084	-.0774	-.0805

## ARC11-019 IAB1 LVAP(ELHL UNSEALED) LEFT VERTICAL

(RETV06)

ALPHA0( 2) = -3.984 BETA0 ( 2) = .011

SECTION ( 1) LEFT VERTICAL		DEPENDENT VARIABLE CP				
Z/BV	.1580	.3170	.6020	.8390	.9250	
X/CV						
.000	.4857	.4427	.4847	.4692	.4768	
.025	-.1135	-.2791	-.3271	-.3514	-.3984	
.050	.0530	-.0308	-.2180	-.1353	-.2892	
.150	-.0083	-.0789	-.1068	-.1332	-.1242	
.300	-.1172	-.1404	.0000	-.1694	-.1778	
.520	-.2717	-.2930	-.3860	-.3015	-.3165	
.685	-.2455	-.3266	-.3773	-.3665	-.3201	
.775	-.1963	-.2221	-.2304	-.2088	-.1624	
.900	-.1528	-.1167	-.0752	-.0335		

ALPHA0( 2) = -3.968 BETA0 ( 3) = 4.081

SECTION ( 1) LEFT VERTICAL		DEPENDENT VARIABLE CP				
Z/BV	.1580	.3170	.6020	.8390	.9250	
X/CV						
.000	.3053	.1594	.1773	.0747	.1974	
.025	-.4823	-.6989	-.7290	-.7643	-.7364	
.050	-.5007	-.6905	-.7243	-.7466	-.7103	
.150	-.2723	-.5095	-.6299	-.7045	-.6476	
.300	-.2386	-.2639	.0000	-.4819	-.4531	
.520	-.3286	-.3492	-.4720	-.3710	-.3570	
.685	-.2607	-.3513	-.4097	-.3560	-.3147	
.775	-.2191	-.2410	-.2550	-.2184	-.1925	
.900	-.1677	-.1278	-.0985	-.0894		

ALPHA0( 3) = .074 BETA0 ( 1) = -6.097

SECTION ( 1) LEFT VERTICAL		DEPENDENT VARIABLE CP				
Z/BV	.1580	.3170	.6020	.8390	.9250	
X/CV						
.000	.0885	-.1246	-.0552	.0404	.0054	
.025	.3660	.3250	.3490	.3414	.3029	
.050	.3187	.2678	.2901	.2938	.2503	
.150	.1722	.1469	.1557	.1466	.0899	
.300	.0372	.0239	.0000	.0233	-.0302	
.520	-.1645	-.1726	-.2139	-.1478	-.1973	
.685	-.2265	-.2708	-.2776	-.2756	-.2747	
.775	-.1661	-.1963	-.1849	-.1772	-.1719	
.900	-.1519	-.1129	-.0905	-.1099		

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## 1A81A - PRESSURE SOURCE DATA TABULATION

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ARC11-019 1A81 LVAP(ELHL UNSEALED) LEFT VERTICAL

(RETV06)

ALPHA0( 3) = .072 BETA0 ( 2) = -4.067

SECTION ( 1) LEFT VERTICAL DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .6020 .8390 .9250

X/CV

.000	.2790	.1557	.1860	.2760	.2198
.025	.2506	.2029	.2243	.2196	.1719
.050	.2328	.1693	.1850	.1881	.1533
.150	.1027	.0717	.0737	.0691	.0302
.300	-.0221	-.0364	.0000	-.0369	-.0739
.520	-.2099	-.2138	-.2640	-.1961	-.2249
.685	-.2393	-.2909	-.3059	-.2847	-.2584
.775	-.1758	-.2014	-.1911	-.1734	-.1574
.900	-.1580	-.1073	-.0734	-.0734	-.0734

ALPHA0( 3) = .076 BETA0 ( 3) = -.005

SECTION ( 1) LEFT VERTICAL DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .6020 .8390 .9250

X/CV

.000	.4448	.3918	.4262	.4101	.4132
.025	-.1516	-.2941	-.3194	-.3401	-.3869
.050	.0129	-.0591	-.2177	-.1876	-.2560
.150	-.0429	-.1025	-.1222	-.1326	-.1345
.300	-.1396	-.1591	.0000	-.1674	-.1748
.520	-.2725	-.2924	-.3754	-.2850	-.2886
.685	-.2378	-.3132	-.3687	-.3512	-.2953
.775	-.1911	-.2192	-.2187	-.1997	-.1521
.900	-.1544	-.1150	-.0688	-.0424	-.0424

ALPHA0( 3) = .087 BETA0 ( 4) = 4.063

SECTION ( 1) LEFT VERTICAL DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .6020 .8390 .9250

X/CV

.000	.2620	.0990	.1133	-.0018	.1342
.025	-.5316	-.7355	-.7134	-.7363	-.6391
.050	-.5179	-.7271	-.7124	-.7145	-.6302
.150	-.2988	-.4917	-.6391	-.6963	-.5793
.300	-.2646	-.2698	.0000	-.5057	-.4971
.520	-.3314	-.3465	-.4481	-.3401	-.3762
.685	-.2520	-.3372	-.3906	-.3401	-.2987
.775	-.2121	-.2330	-.2501	-.2063	-.1861
.900	-.1662	-.1330	-.0874	-.0916	-.0916



## ARC11-019 IAB1 LVAP(ELHL UNSEALD) LEFT VERTICAL

(RETV06)

ALPHA0( 3) = .090 BETA0 ( 5) = 6.100

## SECTION ( 1) LEFT VERTICAL DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .6020 .8390 .9250

## X/CV

.000	.0586	-.1826	-.1449	-.2453	-.0069
.025	-.7016	-.9151	-.8588	-.7516	-.5658
.050	-.7148	-.9332	-.8447	-.7381	-.5611
.150	-.7387	-.8447	-.8416	-.7198	-.5159
.300	-.2806	-.4210	.0000	-.6698	-.4588
.520	-.3459	-.3637	-.5354	-.5539	-.3819
.685	-.2511	-.3496	-.3924	-.4095	-.3059
.775	-.2242	-.2470	-.2760	-.3424	-.2592
.900		-.1793	-.1528	-.2552	-.2022

ALPHA0( 4) = 4.240 BETA0 ( 1) = -4.061

## SECTION ( 1) LEFT VERTICAL DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .6020 .8390 .9250

## X/CV

.000	.2547	.1095	.1449	.2171	.1635
.025	.2100	.1653	.1984	.1906	.1516
.050	.1905	.1348	.1569	.1579	.1304
.150	.0679	.0443	.0505	.0479	.0108
.300	-.0441	-.0471	.0000	-.0476	-.0850
.520	-.2077	-.2209	-.2608	-.1916	-.2330
.685	-.2356	-.2774	-.3039	-.2626	-.2677
.775	-.1740	-.2074	-.1908	-.1647	-.1481
.900		-.1622	-.1098	-.0664	-.0638

ALPHA0( 4) = 4.239 BETA0 ( 2) = -.008

## SECTION ( 1) LEFT VERTICAL DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .6020 .8390 .9250

## X/CV

.000	.4171	.3513	.3735	.3555	.3567
.025	-.1827	-.3184	-.3207	-.3357	-.3848
.050	-.0130	-.0825	-.1928	-.1995	-.2296
.150	-.0694	-.1201	-.1278	-.1412	-.1335
.300	-.1571	-.1675	.0000	-.1660	-.1726
.520	-.2714	-.2831	-.3568	-.2707	-.3010
.685	-.2192	-.3109	-.3460	-.3283	-.2723
.775	-.1858	-.2114	-.2078	-.1839	-.1356
.900		-.1469	-.1087	-.0626	-.0333

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## 1A81A - PRESSURE SOURCE DATA TABULATION

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ARC11-019 1A81 LVAP(ELHL UNSEALED) LEFT VERTICAL

(RETV06)

ALPHA0( 4) = 4.236 BETA0 ( 3) = 4.070

## SECTION ( 1) LEFT VERTICAL

## DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.2247	.0476	.0663	-.0590	.0727
.025	-.5168	-.7592	-.6884	-.6905	-.5980
.050	-.4723	-.7745	-.6926	-.6646	-.5725
.150	-.3528	-.4273	-.6297	-.6610	-.5445
.300	-.2674	-.2546	.0000	-.5153	-.5104
.520	-.2999	-.3111	-.4092	-.2977	-.3681
.685	-.1971	-.2920	-.3585	-.3039	-.2578
.775	-.1846	-.2069	-.2318	-.1855	-.1721
.900		-.1851	-.1205	-.0758	-.0735

ALPHA0( 5) = 8.382 BETA0 ( 1) = -.008

## SECTION ( 1) LEFT VERTICAL

## DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.3933	.3120	.3288	.3004	.3028
.025	-.1871	-.3281	-.3160	-.3052	-.3488
.050	-.0261	-.0875	-.1685	-.2286	-.2311
.150	-.0927	-.1297	-.1349	-.1437	-.1352
.300	-.1729	-.1665	.0000	-.1540	-.1703
.520	-.2778	-.2762	-.3409	-.2456	-.2863
.685	-.2201	-.3015	-.3357	-.3023	-.2518
.775	-.1865	-.2141	-.2001	-.1703	-.1238
.900		-.1458	-.1023	-.0537	-.0289

ALPHA0( 6) = 10.453 BETA0 ( 1) = .004

## SECTION ( 1) LEFT VERTICAL

## DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.3877	.2987	.3056	.2777	.2802
.025	-.1939	-.3232	-.3061	-.3066	-.3531
.050	-.0436	-.1080	-.1697	-.2193	-.2336
.150	-.1007	-.1382	-.1367	-.1398	-.1316
.300	-.1782	-.1775	.0000	-.1589	-.1717
.520	-.2844	-.2824	-.3459	-.2393	-.2810
.685	-.2164	-.3087	-.3252	-.2975	-.2475
.775	-.1886	-.2121	-.1950	-.1681	-.1264
.900		-.1522	-.1046	-.0584	-.0218

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## ARC11-019 1A81 LVAP(ELHL UNSEALD) LEFT VERTICAL

(RETV07) ( 17 OCT 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 976.0000 IN. XT  
 LREF = 1297.0000 INCHES YMRP = .0000 IN. YT  
 BREF = 1297.0000 INCHES ZMRP = 400.0000 IN. ZT  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

MACH = .900 RN/FT = 2.250  
 ELV-1B = 8.000 ELV-0B = 4.000  
 RUDDER = .000 SPDBRK = .000

ALPHA0( 1) = -11.207 BETA0 ( 1) = -4.037

## SECTION ( 1) LEFT VERTICAL

## DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.4862	.3577	.3840	.4323	.3665
.025	.3608	.2317	.2391	.2221	.1560
.050	.3396	.2162	.2076	.2000	.1495
.150	.1942	.1230	.1105	.0814	.0175
.300	.0414	.0112	.0000	-.0383	-.1149
.520	-.1747	-.1758	-.2151	-.2340	-.3163
.685	-.3348	-.6757	-1.0331	-.9335	-.5737
.775	-.2614	-.3131	-.7020	-.6144	-.4957
.900		-.2714	-.2584	-.3952	-.3513

ALPHA0( 1) = -8.684 BETA0 ( 2) = -2.018

## SECTION ( 1) LEFT VERTICAL

## DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.5418	.4384	.4749	.5004	.4607
.025	.2244	.0304	.0173	.0379	-.0530
.050	.2592	.0943	.0618	.0611	.0006
.150	.1253	.0360	.0097	-.0112	-.0527
.300	-.0269	-.0587	.0000	-.0945	-.1497
.520	-.2274	-.2189	-.2474	-.2555	-.3190
.685	-.3485	-.6540	-1.0523	-.9111	-.5104
.775	-.2661	-.3508	-.6844	-.5674	-.4541
.900		-.2771	-.2812	-.4210	-.3293

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## IA81A - PRESSURE SOURCE DATA TABULATION

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ARC11-019 IA81 LVAP(ELHL UNSEALD) LEFT VERTICAL

(RETV07)

ALPHA( 1) = -6.128 BETA( 3) = .034

SECTION ( 1) LEFT VERTICAL

DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.5711	.4709	.5051	.4914	.4936
.025	-.0011	-.2390	-.3479	-.3475	-.4432
.050	.1517	-.0309	-.2749	-.3129	-.3842
.150	.0488	-.0645	-.1056	-.1314	-.1433
.300	-.1113	-.1440	.0000	-.1642	-.2099
.520	-.2839	-.2734	-.3087	-.2902	-.3302
.685	-.3586	-.6325	-1.0506	-.6985	-.7693
.775	-.2684	-.3867	-.5473	-.5432	-.3557
.900		-.2977	-.3909	-.4135	-.2343

ALPHA( 1) = -6.115 BETA( 4) = 2.098

SECTION ( 1) LEFT VERTICAL

DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.5373	.4336	.4480	.3908	.4196
.025	-.1432	-.4938	-.8479	-.8509	-.7718
.050	-.0125	-.4559	-.6413	-.7424	-.7364
.150	-.0314	-.1719	-.2706	-.3326	-.3977
.300	-.1822	-.2325	.0000	-.2904	-.2681
.520	-.3403	-.3548	-.3775	-.3424	-.3520
.685	-.3867	-.5228	-.9135	-.6845	-.7004
.775	-.2688	-.4337	-.5121	-.4416	-.2948
.900		-.2961	-.3859	-.3336	-.2042

ALPHA( 1) = -6.107 BETA( 5) = 4.143

SECTION ( 1) LEFT VERTICAL

DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.4749	.3508	.3440	.2473	.3033
.025	-.2594	-.6339	-.8894	-.9625	-1.1515
.050	-.2695	-.5932	-.9442	-.9815	-1.1199
.150	-.1493	-.3837	-.5212	-.7538	-.9907
.300	-.2439	-.3509	.0000	-.5459	-.5288
.520	-.3974	-.4111	-.5269	-.5371	-.3957
.685	-.4218	-.5086	-.7165	-.3633	-.3184
.775	-.2617	-.4229	-.4374	-.2841	-.2383
.900		-.3182	-.3140	-.2212	-.1823

## ARC11-019 IAB1 LVAP(ELHL UNSEALED) LEFT VERTICAL

(RETV07)

ALPHA0( 2) = -4.084 BETA0 ( 1) = -6.127

SECTION ( 1) LEFT VERTICAL		DEPENDENT VARIABLE CP				
Z/BV	.1580	.3170	.6020	.8390	.9250	
X/CV						
.000	.3520	.2014	.2164	.2845	.1855	
.025	.4419	.3346	.3384	.3103	.2631	
.050	.3951	.2882	.2817	.2704	.2167	
.150	.2381	.1742	.1666	.1334	.0525	
.300	.0906	.0549	.0000	.0009	-.0942	
.520	-.1336	-.1458	-.1946	-.2207	-.3154	
.685	-.3328	-.6470	-.9875	-.9972	-.9888	
.775	-.2525	-.2928	-.4064	-.8596	-.6859	
.900	-.2522	-.2652	-.3971	-.3871		

ALPHA0( 2) = -4.075 BETA0 ( 2) = -4.085

SECTION ( 1) LEFT VERTICAL		DEPENDENT VARIABLE CP				
Z/BV	.1580	.3170	.6020	.8390	.9250	
X/CV						
.000	.4632	.3226	.3416	.3940	.3243	
.025	.3322	.1920	.2064	.2087	.1484	
.050	.3111	.1798	.1800	.1826	.1315	
.150	.1652	.0920	.0875	.0649	-.0010	
.300	.0116	-.0152	.0000	-.0454	-.1320	
.520	-.1954	-.1934	-.2202	-.2441	-.3263	
.685	-.3390	-.6785	-1.0103	-.9475	-.6075	
.775	-.2611	-.3172	-.5550	-.6683	-.5173	
.900		-.2681	-.2881	-.4071	-.3660	

ALPHA0( 2) = -4.057 BETA0 ( 3) = .023

SECTION ( 1) LEFT VERTICAL		DEPENDENT VARIABLE CP				
Z/BV	.1580	.3170	.6020	.8390	.9250	
X/CV						
.000	.5471	.4214	.4714	.4578	.4616	
.025	-.0420	-.2705	-.3657	-.3570	-.4501	
.050	.1139	-.0595	-.2772	-.3207	-.3956	
.150	.0117	-.1043	-.1265	-.1431	-.1518	
.300	-.1496	-.1726	.0000	-.1729	-.2155	
.520	-.3079	-.2860	-.3184	-.3048	-.3433	
.685	-.3409	-.5828	-1.0022	-.7137	-.7317	
.775	-.2740	-.3756	-.5197	-.5535	-.3445	
.900		-.2795	-.3646	-.4028	-.2234	

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## IAB1A - PRESSURE SOURCE DATA TABULATION

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ARC11-019 IAB1 LVAP(ELHL UNSEALED) LEFT VERTICAL

(RETV07)

ALPHA0( 2) = -4.038 BETA0( 4) = 4.117

## SECTION ( 1)LEFT VERTICAL

## DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.4363	.3058	.2969	.1904	.2496
.025	-.3052	-.6718	-.9159	-.9730	-1.1056
.050	-.3052	-.6465	-.9704	-.9970	-1.0507
.150	-.1764	-.4070	-.5636	-.7748	-.9606
.300	-.2873	-.3731	.0000	-.5907	-.6520
.520	-.4444	-.4200	-.5511	-.5543	-.4394
.685	-.3971	-.4847	-.6626	-.3593	-.2990
.775	-.2718	-.3914	-.4598	-.2796	-.2354
.900		-.3240	-.3167	-.2159	-.1756

ALPHA0( 2) = -4.037 BETA0( 5) = 6.169

## SECTION ( 1)LEFT VERTICAL

## DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.3276	.1780	.1647	.0398	.1266
.025	-.3966	-.7779	-1.0137	-1.1204	-1.1884
.050	-.3772	-.8383	-1.0282	-1.1371	-1.1915
.150	-.4725	-.5868	-.8618	-1.0343	-1.1416
.300	-.3005	-.5315	.0000	-.7048	-.8421
.520	-.4807	-.5133	-.7966	-.4574	-.6090
.685	-.4493	-.4999	-.6424	-.3526	-.4422
.775	-.2424	-.4047	-.4820	-.2749	-.3283
.900		-.3502	-.3487	-.2163	-.2220

ALPHA0( 3) = -2.013 BETA0( 1) = -6.133

## SECTION ( 1)LEFT VERTICAL

## DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.3295	.1716	.1734	.2422	.1325
.025	.4129	.3005	.3124	.2891	.2488
.050	.3675	.2566	.2572	.2505	.1985
.150	.2120	.1563	.1403	.1170	.0304
.300	.0650	.0413	.0000	-.0108	-.1151
.520	-.1458	-.1520	-.2025	-.2348	-.3323
.685	-.3417	-.6317	-.9595	-.9701	-.9444
.775	-.2463	-.2914	-.3859	-.6714	-.6590
.900		-.2522	-.2687	-.3159	-.3540

## ARC11-019 IAB1 LVAP(ELHL UNSEALD) LEFT VERTICAL

(RETV07)

ALPHA0( 3) = -2.004 BETA0 ( 2) = -2.060

## SECTION ( 1) LEFT VERTICAL DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.4869	.3525	.3864	.4221	.3830
.025	.1473	-.0393	-.0250	.0217	-.0670
.050	.1821	.0221	.0103	.0346	-.0242
.150	.0484	-.0394	-.0269	-.0341	-.0868
.300	-.1054	-.1184	.0000	-.1161	-.1785
.520	-.2777	-.2447	-.2732	-.2835	-.3415
.685	-.3368	-.5464	-1.0205	-.7904	-.4420
.775	-.2634	-.3404	-.4709	-.5770	-.4162
.900		-.2800	-.2937	-.4336	-.3415

ALPHA0( 3) = -1.969 BETA0 ( 3) = 2.058

## SECTION ( 1) LEFT VERTICAL DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.4855	.3573	.3673	.3048	.3356
.025	-.1987	-.5448	-.8260	-.8506	-.8101
.050	-.0504	-.4774	-.6674	-.7783	-.7696
.150	-.0847	-.2402	-.3045	-.3507	-.4442
.300	-.2545	-.2920	.0000	-.3000	-.2603
.520	-.3931	-.3764	-.4006	-.3447	-.3636
.685	-.3511	-.4653	-.6572	-.6115	-.6561
.775	-.2683	-.3984	-.4612	-.4435	-.2747
.900		-.2909	-.3416	-.3076	-.1737

ALPHA0( 3) = -1.958 BETA0 ( 4) = 6.150

## SECTION ( 1) LEFT VERTICAL DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.2985	.1527	.1293	-.0005	.0778
.025	-.4070	-.7829	-1.0147	-1.1044	-1.1743
.050	-.3866	-.8456	-1.0283	-1.1078	-1.1762
.150	-.4597	-.6106	-.8716	-.9921	-1.1148
.300	-.3270	-.5427	.0000	-.7160	-.8820
.520	-.4993	-.5074	-.7890	-.4755	-.6120
.685	-.4289	-.4865	-.6332	-.3515	-.3900
.775	-.2435	-.3916	-.4842	-.2893	-.2910
.900		-.3404	-.3412	-.2422	-.2075

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ARC11-019 IA81 LVAP(ELHL UNSEALD) LEFT VERTICAL

(RETV07)

ALPHA0( 4) = .059 BETA0 ( 1) = -6.145

SECTION ( 1) LEFT VERTICAL DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .6020 .8390 .9250

X/CV

.000	.3201	.1301	.1205	.1752	.0668
.025	.3812	.2703	.3033	.2742	.2350
.050	.3452	.2301	.2459	.2347	.1840
.150	.1931	.1380	.1292	.0975	.0470
.300	.0409	.0289	.0000	-.0254	-.1224
.520	-.1600	-.1619	-.2147	-.2442	-.2936
.685	-.3334	-.5652	-.8234	-.9395	-.8971
.775	-.2481	-.2897	-.3637	-.5989	-.5068
.900		-.2372	-.2541	-.2027	-.2379

ALPHA0( 4) = .063 BETA0 ( 2) = -4.101

SECTION ( 1) LEFT VERTICAL DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .6020 .8390 .9250

X/CV

.000	.4183	.2464	.2498	.2927	.2200
.025	.2673	.1228	.1694	.1789	.1281
.050	.2457	.1147	.1394	.1527	.1065
.150	.0985	.0353	.0532	.0388	-.0339
.300	-.0452	-.0520	.0000	-.0713	-.1626
.520	-.2135	-.2065	-.2464	-.2749	-.3129
.685	-.3213	-.5531	-.9742	-.8993	-.5892
.775	-.2514	-.3132	-.4142	-.5911	-.4408
.900		-.2593	-.2676	-.3588	-.2867

ALPHA0( 4) = .066 BETA0 ( 3) = -.005

SECTION ( 1) LEFT VERTICAL DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .6020 .8390 .9250

X/CV

.000	.4981	.3565	.3863	.3969	.3956
.025	-.0981	-.3387	-.4039	-.3655	-.4590
.050	.0630	-.1193	-.3025	-.3181	-.3964
.150	-.0463	-.1702	-.1551	-.1560	-.1749
.300	-.2189	-.2276	.0000	-.1849	-.2414
.520	-.3553	-.3021	-.3245	-.3143	-.3405
.685	-.3224	-.4332	-.8505	-.6900	-.6080
.775	-.2618	-.3670	-.4775	-.5179	-.3292
.900		-.2641	-.2945	-.3413	-.2066



## ARC11-019 IAB1 LVAP(ELHL UNSEALD) LEFT VERTICAL

(RETV07)

ALPHA0( 4) = .079 BETA0 ( 4) = 4.088

SECTION ( 1) LEFT VERTICAL		DEPENDENT VARIABLE CP				
Z/BV	.1580	.3170	.6020	.8390	.9250	
X/CV						
.000	.3946	.2432	.2142	.1014	.1631	
.025	-.3438	-.7097	-.9434	-.9450	-.8587	
.050	-.3198	-.6881	-.9872	-.9541	-.8830	
.150	-.2226	-.4456	-.6151	-.7973	-.8472	
.300	-.3314	-.4139	.0000	-.6425	-.7352	
.520	-.4794	-.4086	-.5238	-.5158	-.5265	
.685	-.3435	-.4353	-.5329	-.3729	-.3203	
.775	-.2377	-.3320	-.3780	-.2712	-.2522	
.900		-.2962	-.2734	-.1722	-.1476	

ALPHA0( 4) = .082 BETA0 ( 5) = 6.135

SECTION ( 1) LEFT VERTICAL		DEPENDENT VARIABLE CP				
Z/BV	.1580	.3170	.6020	.8390	.9250	
X/CV						
.000	.2918	.1177	.0811	-.0567	.0338	
.025	-.4550	-.8067	-1.0258	-.9303	-.7524	
.050	-.4306	-.8744	-1.0357	-.9478	-.7444	
.150	-.5025	-.6392	-.9003	-.8862	-.7147	
.300	-.3513	-.5601	.0000	-.7515	-.6226	
.520	-.5254	-.5026	-.7910	-.5994	-.4978	
.685	-.4043	-.4619	-.5403	-.5009	-.4088	
.775	-.2565	-.3824	-.4105	-.4522	-.3612	
.900		-.3181	-.2945	-.3711	-.3136	

ALPHA0( 5) = 2.177 BETA0 ( 1) = -6.133

SECTION ( 1) LEFT VERTICAL		DEPENDENT VARIABLE CP				
Z/BV	.1580	.3170	.6020	.8390	.9250	
X/CV						
.000	.3069	.1080	.0696	.1212	.0146	
.025	.3471	.2407	.2799	.2484	.1836	
.050	.3042	.2059	.2263	.2131	.1725	
.150	.1614	.1137	.1137	.0802	.0401	
.300	.0264	.0114	.0000	-.0372	-.1103	
.520	-.1667	-.1677	-.2355	-.2511	-.2976	
.685	-.3411	-.5473	-.7533	-.9260	-.8326	
.775	-.2568	-.2955	-.3388	-.5644	-.4292	
.900		-.2396	-.2435	-.1780	-.2299	

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ARC11-019 1A81 LVAP(ELHL UNSEALED) LEFT VERTICAL

(RETV07)

ALPHA0( 5) = 2.184 BETA0 ( 2) = -2.056

SECTION ( 1) LEFT VERTICAL DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.4041	.3004	.3148	.3603	.3229
.025	.0748	-.1188	-.0197	.0072	-.0786
.050	.1230	-.0417	.0000	.0167	-.0460
.150	-.0054	-.0917	-.0432	-.0568	-.0967
.300	-.1543	-.1545	.0000	-.1367	-.1945
.520	-.2912	-.2466	-.2875	-.3043	-.3251
.685	-.2943	-.4713	-.8528	-.8016	-.5145
.775	-.2511	-.3061	-.4243	-.5766	-.3914
.900		-.2398	-.2693	-.3512	-.2350

ALPHA0( 5) = 2.185 BETA0 ( 3) = 2.047

SECTION ( 1) LEFT VERTICAL DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.4079	.3055	.2890	.2414	.2640
.025	-.2300	-.6024	-.8042	-.7356	-.7565
.050	-.0515	-.5252	-.7593	-.7069	-.7210
.150	-.1267	-.2877	-.3398	-.3367	-.4202
.300	-.3087	-.3405	.0000	-.3073	-.2781
.520	-.4354	-.3714	-.3703	-.3670	-.3667
.685	-.3283	-.3865	-.6152	-.5167	-.3523
.775	-.2419	-.3156	-.4213	-.3746	-.2183
.900		-.2761	-.2454	-.2253	-.1168

ALPHA0( 5) = 2.186 BETA0 ( 4) = 6.135

SECTION ( 1) LEFT VERTICAL DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.2758	.0905	.0242	-.1150	-.0156
.025	-.5107	-.8216	-1.0340	-.9293	-.7285
.050	-.4757	-.8970	-1.0439	-.9459	-.7133
.150	-.5264	-.6622	-.9235	-.8726	-.6835
.300	-.3711	-.5949	.0000	-.7500	-.6131
.520	-.5245	-.4888	-.7776	-.6127	-.5167
.685	-.3511	-.4317	-.4921	-.5106	-.4304
.775	-.2543	-.3813	-.3457	-.4630	-.3865
.900		-.3132	-.2425	-.3790	-.3404

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## ARC11-019 IAB1 LVAP(ELHL UNSEALED) LEFT VERTICAL

(RETV07)

ALPHA0( 6) = 4.257 BETA0 ( 1) = -6.123

SECTION ( 1) LEFT VERTICAL		DEPENDENT VARIABLE CP				
Z/BV	.1580	.3170	.6020	.8390	.9250	
X/CV						
.000	.2930	.0894	.0251	.0641	-.0335	
.025	.2869	.2300	.2581	.2366	.2104	
.050	.2627	.1893	.2003	.1999	.1574	
.150	.1347	.0879	.0992	.0735	-.0047	
.300	.0072	-.0044	.0000	-.0407	-.1452	
.520	-.1676	-.1663	-.2396	-.2919	-.3606	
.685	-.3244	-.5363	-.6521	-.9278	-.8835	
.775	-.2414	-.2908	-.3392	-.4420	-.3485	
.900		-.2333	-.2783	-.1785	-.1876	

ALPHA0( 6) = 4.260 BETA0 ( 2) = -4.081

SECTION ( 1) LEFT VERTICAL		DEPENDENT VARIABLE CP				
Z/BV	.1580	.3170	.6020	.8390	.9250	
X/CV						
.000	.3485	.2042	.1592	.2056	.1591	
.025	.1958	.0861	.1445	.1634	.1263	
.050	.1862	.0745	.1105	.1377	.0939	
.150	.0511	-.0026	.0275	.0257	-.0438	
.300	-.0870	-.0937	.0000	-.0830	-.1691	
.520	-.2363	-.2113	-.2622	-.2929	-.3604	
.685	-.3184	-.5436	-.7334	-.8905	-.6324	
.775	-.2447	-.3010	-.3901	-.5400	-.3397	
.900		-.2369	-.2663	-.1582	-.1782	

ALPHA0( 6) = 4.257 BETA0 ( 3) = -.003

SECTION ( 1) LEFT VERTICAL		DEPENDENT VARIABLE CP				
Z/BV	.1580	.3170	.6020	.8390	.9250	
X/CV						
.000	.4387	.2938	.3328	.3276	.3228	
.025	-.1509	-.3844	-.3934	-.3662	-.4672	
.050	.0119	-.1739	-.2789	-.3492	-.3985	
.150	-.0917	-.2238	-.1517	-.1738	-.1941	
.300	-.2542	-.2540	.0000	-.2066	-.2549	
.520	-.3486	-.2820	-.3349	-.3403	-.3887	
.685	-.2861	-.4039	-.6562	-.6429	-.4588	
.775	-.2465	-.3235	-.4292	-.4521	-.3263	
.900		-.2525	-.2315	-.2436	-.1618	

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ARC11-019 1A81 LVAP(ELHL UNSEALD) LEFT VERTICAL

(RETV07)

ALPHA0( 6) = 4.257 BETA0 ( 4) = 4.093

SECTION ( 1) LEFT VERTICAL DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.3375	.1971	.1133	.0066	.0898
.025	-.3848	-.7517	-.9495	-.7890	-.6784
.050	-.3198	-.7609	-.9805	-.7784	-.6837
.150	-.2406	-.5043	-.6843	-.7924	-.6584
.300	-.3825	-.4544	.0000	-.7334	-.6614
.520	-.4806	-.3912	-.4233	-.5408	-.5563
.685	-.3090	-.3610	-.4278	-.3804	-.4019
.775	-.2294	-.2948	-.2986	-.2817	-.3176
.900		-.2660	-.2042	-.1595	-.2054

ALPHA0( 6) = 4.251 BETA0 ( 5) = 6.145

SECTION ( 1) LEFT VERTICAL DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.2578	.0655	-.0328	-.1733	-.0572
.025	-.5688	-.8644	-1.0433	-.8682	-.6307
.050	-.5114	-.9400	-1.0387	-.8765	-.6405
.150	-.4328	-.7129	-.9301	-.8159	-.6348
.300	-.4297	-.6089	.0000	-.7132	-.5619
.520	-.4648	-.3932	-.7246	-.6455	-.4666
.685	-.2736	-.3108	-.4082	-.5403	-.4133
.775	-.2432	-.3100	-.2730	-.4639	-.3819
.900		-.2641	-.1983	-.3709	-.3352

ALPHA0( 7) = 6.353 BETA0 ( 1) = -4.069

SECTION ( 1) LEFT VERTICAL DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.3015	.1584	.1354	.1859	.1256
.025	.1588	.0706	.1463	.1569	.1120
.050	.1504	.0544	.1067	.1271	.0788
.150	.0195	-.0230	.0196	.0128	-.0542
.300	-.1125	-.1000	.0000	-.0902	-.1778
.520	-.2475	-.2090	-.2648	-.3011	-.3708
.685	-.3200	-.5085	-.6725	-.9000	-.5457
.775	-.2475	-.2942	-.3689	-.4850	-.3211
.900		-.2392	-.2493	-.1153	-.1447

## ARC11-019 IAB1 LVAP(ELHL UNSEALED) LEFT VERTICAL

(RETV07)

ALPHA0( 7) = 6.352 BETA0 ( 2) = -2.035

SECTION ( 1)LEFT VERTICAL		DEPENDENT VARIABLE CP				
Z/BV	.1580	.3170	.6020	.6390	.9250	
X/CV						
.000	.3193	.2237	.2700	.3014	.2607	
.025	.0354	-.1122	-.0422	-.0035	-.0820	
.050	.0720	-.0556	-.0198	-.0005	-.0612	
.150	-.0448	-.1127	-.0585	-.0695	-.1264	
.300	-.1839	-.1657	.0000	-.1475	-.2162	
.520	-.3021	-.2472	-.2972	-.3265	-.3807	
.685	-.2894	-.4358	-.7359	-.7848	-.5244	
.775	-.2409	-.2934	-.4135	-.5847	-.3394	
.900		-.2438	-.2475	-.1609	-.1825	

ALPHA0( 7) = 6.347 BETA0 ( 3) = .010

SECTION ( 1)LEFT VERTICAL		DEPENDENT VARIABLE CP				
Z/BV	.1580	.3170	.6020	.8390	.9250	
X/CV						
.000	.3242	.2388	.3191	.3032	.3031	
.025	-.0857	-.3502	-.4192	-.3658	-.4566	
.050	-.0199	-.2062	-.2980	-.3594	-.3825	
.150	-.0961	-.2079	-.1602	-.1786	-.1956	
.300	-.2262	-.2537	.0000	-.2051	-.2561	
.520	-.3275	-.3018	-.3400	-.3374	-.3904	
.685	-.2817	-.3783	-.6497	-.6473	-.3874	
.775	-.2359	-.2916	-.3992	-.4631	-.2954	
.900		-.2450	-.2218	-.2357	-.1632	

ALPHA0( 7) = 6.344 BETA0 ( 4) = 2.069

SECTION ( 1)LEFT VERTICAL		DEPENDENT VARIABLE CP				
Z/BV	.1580	.3170	.6020	.8390	.9250	
X/CV						
.000	.3348	.2197	.2269	.1596	.1904	
.025	-.2377	-.6359	-.7799	-.7181	-.7062	
.050	-.0962	-.5162	-.8061	-.7094	-.6861	
.150	-.1600	-.3216	-.3463	-.3622	-.4840	
.300	-.2962	-.3364	.0000	-.3349	-.3153	
.520	-.4301	-.3235	-.3834	-.3741	-.4245	
.685	-.2889	-.3565	-.5761	-.5071	-.2646	
.775	-.2320	-.2792	-.3739	-.3191	-.1881	
.900		-.2635	-.2240	-.1466	-.0866	

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1A81A - PRESSURE SOURCE DATA TABULATION

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ARC11-019 1A81 LVAP(ELHL UNSEALD) LEFT VERTICAL

(RETV07)

ALPHA0( 7) = 6.340 BETA0 ( 5) = 4.114

SECTION ( 1) LEFT VERTICAL		DEPENDENT VARIABLE CP				
Z/BV	.1580	.3170	.6020	.8390	.9250	
X/CV						
.000	.2864	.1384	.0800	-.0171	.0474	
.025	-.4103	-.7778	-.8925	-.7468	-.8042	
.050	-.3373	-.7937	-.9149	-.7438	-.7920	
.150	-.2720	-.5222	-.6884	-.7468	-.7825	
.300	-.4157	-.4471	.0000	-.6971	-.6891	
.520	-.4463	-.3488	-.4023	-.5642	-.4784	
.685	-.2901	-.3287	-.5104	-.3687	-.3167	
.775	-.2349	-.2934	-.3139	-.3000	-.2442	
.900		-.2771	-.2167	-.2024	-.1758	

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## ARC11-019 1AB1 LVAP(ELHL UNSEALED) LEFT VERTICAL

(RETV08) ( 17 OCT 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 976.0000 IN. XT  
 LREF = 1297.0000 INCHES YMRP = .0000 IN. YT  
 BREF = 1297.0000 INCHES ZMRP = 400.0000 IN. ZT  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

MACH = 1.100 RN/FT = 3.000  
 ELV-IB = 8.000 ELV-OB = 4.000  
 RUDDER = .000 SPDBRK = .000

ALPHA0 ( 1 ) = .064 BETA0 ( 1 ) = -6.230

## SECTION ( 1 ) LEFT VERTICAL

## DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .6020 .8390 .9250

## X/CV

.000	.5335	.3656	.3399	.3709	.3135
.025	.5695	.4349	.4062	.3781	.3602
.050	.5305	.3964	.3591	.3513	.3239
.150	.3883	.2930	.2667	.2460	.1887
.300	.2297	.1917	.0000	.1633	.0764
.520	.0486	.0450	.0058	-.0143	-.0774
.685	-.3884	-.6411	-.6493	-.6662	-.7219
.775	-.3135	-.4405	-.5944	-.6471	-.7155
.900		-.3364	-.5828	-.6513	-.6899

ALPHA0 ( 1 ) = .071 BETA0 ( 2 ) = -4.159

## SECTION ( 1 ) LEFT VERTICAL

## DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .6020 .8390 .9250

## X/CV

.000	.6075	.4567	.4337	.4429	.4012
.025	.4585	.3120	.2823	.2804	.2581
.050	.4509	.3013	.2588	.2646	.2449
.150	.3207	.2090	.1898	.1807	.1354
.300	.1589	.1137	.0000	.1114	.0360
.520	-.0139	-.0166	-.0288	-.0412	-.0951
.685	-.4010	-.6928	-.6819	-.6862	-.7443
.775	-.3258	-.4452	-.6356	-.6822	-.7465
.900		-.3451	-.6396	-.6892	-.7210

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## 1A81A - PRESSURE SOURCE DATA TABULATION

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ARC11-019 1A81 LVAP(ELHL UNSEALD) LEFT VERTICAL

(RETV08)

ALPHA( 1) = .075 BETA( 3) = -.029

SECTION ( 1) LEFT VERTICAL DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.6890	.5600	.5226	.4790	.5020
.025	.1128	-.0657	-.2061	-.2224	-.2772
.050	.2990	.1367	-.0509	-.1280	-.2072
.150	.2290	.0723	.0116	-.0007	-.0166
.300	.0665	-.0024	.0000	-.0167	-.0441
.520	-.0950	-.1011	-.1101	-.0921	-.1226
.685	-.4213	-.7260	-.7159	-.6973	-.7460
.775	-.3142	-.4537	-.6772	-.7243	-.7522
.900		-.3620	-.7042	-.7241	-.7162

ALPHA( 1) = .094 BETA( 4) = 4.123

SECTION ( 1) LEFT VERTICAL DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.5912	.4559	.4050	.3100	.3553
.025	-.0986	-.3544	-.5487	-.7985	-.8159
.050	-.0816	-.3438	-.5767	-.8023	-.8032
.150	.0141	-.2088	-.3960	-.5096	-.7182
.300	-.0392	-.1503	.0000	-.2763	-.2829
.520	-.2005	-.2151	-.2390	-.2450	-.2086
.685	-.4710	-.7346	-.7260	-.7182	-.7422
.775	-.3260	-.4809	-.6985	-.7234	-.7527
.900		-.4055	-.5754	-.7197	-.7343

ALPHA( 1) = .103 BETA( 5) = 6.207

SECTION ( 1) LEFT VERTICAL DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.4985	.3507	.2995	.2069	.2679
.025	-.1954	-.4351	-.6451	-.7647	-.9924
.050	-.1530	-.4869	-.6549	-.7659	-.9512
.150	-.2676	-.3602	-.5667	-.6300	-.8375
.300	-.0579	-.2876	.0000	-.5092	-.5075
.520	-.2516	-.2945	-.4499	-.5155	-.4221
.685	-.5027	-.6399	-.7320	-.7991	-.8402
.775	-.3172	-.4833	-.7158	-.7701	-.8469
.900		-.4179	-.5424	-.5440	-.6061



ARC11-019 IAB1 LVAP(ELHL UNSEALD) LEFT VERTICAL

(RETV08)

ALPHA0( 2) = 2.216 BETA0( 1) = -6.215

SECTION ( 1) LEFT VERTICAL		DEPENDENT VARIABLE CP				
Z/BV	.1580	.3170	.6020	.8390	.9250	
X/CV						
.000	.5025	.3299	.2987	.3207	.2621	
.025	.5184	.3903	.3582	.3382	.3221	
.050	.4861	.3539	.3137	.3105	.2886	
.150	.3452	.2477	.2225	.2075	.1528	
.300	.1856	.1447	.0000	.1284	.0462	
.520	.0111	.0137	-.0218	-.0398	-.1061	
.685	-.4085	-.6658	-.6728	-.6846	-.7389	
.775	-.3150	-.4476	-.6148	-.6669	-.7302	
.900		-.3371	-.6043	-.6689	-.7067	

ALPHA0( 2) = 2.214 BETA0( 2) = -2.090

SECTION ( 1) LEFT VERTICAL		DEPENDENT VARIABLE CP				
Z/BV	.1580	.3170	.6020	.8390	.9250	
X/CV						
.000	.6561	.5000	.4546	.4453	.4368	
.025	.2649	.1079	.0538	.0820	.0351	
.050	.3353	.1750	.0983	.1082	.0833	
.150	.2387	.1020	.0673	.0687	.0366	
.300	.0807	.0181	.0000	.0273	-.0253	
.520	-.1066	-.0897	-.0645	-.0725	-.1247	
.685	-.3832	-.7112	-.7084	-.7055	-.7519	
.775	-.3059	-.4310	-.6622	-.7123	-.7579	
.900		-.3482	-.6809	-.7168	-.7282	

ALPHA0( 2) = 2.224 BETA0( 3) = 2.058

SECTION ( 1) LEFT VERTICAL		DEPENDENT VARIABLE CP				
Z/BV	.1580	.3170	.6020	.8390	.9250	
X/CV						
.000	.6427	.4954	.4495	.3686	.3925	
.025	-.1040	-.2964	-.5191	-.5994	-.5804	
.050	.1337	-.2471	-.4222	-.5266	-.5434	
.150	.1291	-.0376	-.1352	-.1543	-.1547	
.300	-.0283	-.1072	.0900	-.1326	-.1342	
.520	-.1993	-.1833	-.1855	-.1499	-.1732	
.685	-.3763	-.6449	-.7289	-.7126	-.7422	
.775	-.2929	-.4387	-.7010	-.7326	-.7599	
.900		-.4002	-.6299	-.7386	-.7325	

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IA81A - PRESSURE SOURCE DATA TABULATION

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ARC11-019 IA81 LVAP(ELHL UNSEALD) LEFT VERTICAL

(RETV08)

ALPHA0( 2) = 2.234 BETA0 ( 4) = 6.197

SECTION ( 1) LEFT VERTICAL		DEPENDENT VARIABLE CP				
Z/BV	.1580	.3170	.6020	.8390	.9250	
X/CV						
.000	.4711	.3234	.2677	.1577	.2184	
.025	-.2809	-.4498	-.6514	-.7586	-.9845	
.050	-.2123	-.4955	-.6624	-.7569	-.9500	
.150	-.3169	-.3780	-.5813	-.6254	-.8306	
.300	-.0698	-.3197	.0000	-.5312	-.5039	
.520	-.2669	-.3147	-.4638	-.5558	-.4491	
.685	-.5112	-.6412	-.7464	-.7854	-.8484	
.775	-.3210	-.4830	-.7277	-.7587	-.8274	
.900		-.4174	-.5384	-.5391	-.5798	

ALPHA0( 3) = 4.330 BETA0 ( 1) = -4.129

SECTION ( 1) LEFT VERTICAL		DEPENDENT VARIABLE CP				
Z/BV	.1580	.3170	.6020	.8390	.9250	
X/CV						
.000	.5610	.4008	.3552	.3554	.3187	
.025	.3655	.2260	.1975	.2055	.1927	
.050	.3691	.2268	.1778	.1905	.1768	
.150	.2499	.1331	.1134	.1147	.0745	
.300	.0942	.0421	.0000	.0533	-.0159	
.520	-.0761	-.0762	-.0767	-.0927	-.1411	
.685	-.4343	-.6971	-.6974	-.7035	-.7579	
.775	-.3352	-.4486	-.6482	-.6993	-.7609	
.900		-.3346	-.6614	-.7082	-.7427	

ALPHA0( 3) = 4.329 BETA0 ( 2) = -.008

SECTION ( 1) LEFT VERTICAL		DEPENDENT VARIABLE CP				
Z/BV	.1580	.3170	.6020	.8390	.9250	
X/CV						
.000	.6414	.4826	.4320	.3882	.4087	
.025	.0515	-.1236	-.2549	-.2694	-.3198	
.050	.2404	.0742	-.1422	-.2079	-.2733	
.150	.1595	.0057	-.0530	-.0622	-.0762	
.300	-.0034	-.0730	.0000	-.0742	-.0945	
.520	-.1605	-.1562	-.1632	-.1287	-.1665	
.685	-.4344	-.7236	-.7376	-.7194	-.7659	
.775	-.3122	-.4480	-.6964	-.7384	-.7749	
.900		-.3818	-.6432	-.7417	-.7434	

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## ARC11-019 IAB1 LVAP(ELHL UNSEALD) LEFT VERTICAL

(RETV08)

ALPHA0( 3) = 4.334 BETA0 ( 3) = 4.139

SECTION ( 1)LEFT VERTICAL		DEPENDENT VARIABLE CP			
Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.5496	.3968	.3205	.2309	.2717
.025	-.1863	-.3846	-.5708	-.7897	-.8312
.050	-.1302	-.4042	-.6040	-.7842	-.8178
.150	.0206	-.2557	-.4266	-.5549	-.7279
.300	-.0896	-.1863	.0000	-.3223	-.2835
.520	-.2787	-.2682	-.2712	-.2720	-.2653
.685	-.3549	-.5641	-.7518	-.7401	-.7694
.775	-.3041	-.4690	-.7122	-.7411	-.7662
.900		-.3992	-.4826	-.7494	-.7544

ALPHA0( 3) = 4.334 BETA0 ( 4) = 6.220

SECTION ( 1)LEFT VERTICAL		DEPENDENT VARIABLE CP			
Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.4572	.2980	.2361	.1173	.1756
.025	-.3763	-.4937	-.6514	-.7507	-.9778
.050	-.2761	-.5295	-.6681	-.7507	-.9501
.150	-.1724	-.4218	-.5819	-.6123	-.7924
.300	-.1372	-.3282	.0000	-.5498	-.5298
.520	-.3238	-.3127	-.4699	-.5712	-.4712
.685	-.3580	-.5799	-.7532	-.7840	-.8558
.775	-.3172	-.4803	-.7221	-.7613	-.8334
.900		-.3914	-.5251	-.5448	-.5817

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ARC11-019 IAB1 LVAP(ELHL UNSEALD) LEFT VERTICAL

(RETV09) ( 17 OCT 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 976.0000 IN. XT  
 LREF = 1297.0000 INCHES. YMRP = .0000 IN. YT  
 BREF = 1297.0000 INCHES ZMRP = 400.0000 IN. ZT  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

MACH = 1.100 RN/FT = 2.250  
 ELV-1B = 8.000 ELV-0B = 4.000  
 RUDDER = .000 SPDBRK = .000

ALPHA0( 1) = -6.236 BETA0( 1) = -4.085

## SECTION ( 1) LEFT VERTICAL

## DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.6828	.5468	.5478	.5759	.5304
.025	.5462	.4074	.3854	.3707	.3275
.050	.5312	.3972	.3684	.3550	.3209
.150	.3996	.3095	.2902	.2604	.2109
.300	.2499	.2136	.0000	.1715	.1040
.520	.0653	.0535	.0285	.0173	-.0446
.685	-.3772	-.6495	-.6617	-.6523	-.7301
.775	-.3204	-.4871	-.6162	-.6653	-.7271
.900		-.3449	-.6058	-.6663	-.6705

ALPHA0( 1) = -6.225 BETA0( 2) = -2.030

## SECTION ( 1) LEFT VERTICAL

## DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.7374	.6208	.6146	.6244	.5997
.025	.4252	.2422	.1987	.2164	.1394
.050	.4699	.3004	.2429	.2420	.1896
.150	.3508	.2366	.2023	.1882	.1470
.300	.1958	.1501	.0000	.1233	.0688
.520	.0246	.0167	.0070	-.0053	-.0423
.685	-.4064	-.6717	-.6663	-.6576	-.7104
.775	-.3337	-.5120	-.6298	-.6822	-.7048
.900		-.3699	-.6338	-.6805	-.6503

## ARC11-019 IAB1 LVAP(ELHL UNSEALD) LEFT VERTICAL

(RETV09)

ALPHA0( 1) = -6.193 BETA0 ( 3) = .032

SECTION ( 1) LEFT VERTICAL DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .6020 .8390 .9250

X/CV

.000	.7552	.6454	.6386	.6117	.6219
.025	.2176	.0115	-.1078	-.1261	-.1905
.050	.3754	.1973	-.0576	-.0879	-.1450
.150	.2892	.1471	.0966	.0796	.0689
.300	.1294	.0766	.0000	.0524	.0317
.520	-.0254	-.0341	-.0430	-.0204	-.0566
.685	-.4113	-.6957	-.6854	-.6621	-.7086
.775	-.3295	-.4963	-.6525	-.6980	-.7126
.900		-.3681	-.6731	-.6946	-.6714

ALPHA0( 1) = -6.179 BETA0 ( 4) = 2.098

SECTION ( 1) LEFT VERTICAL DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .6020 .8390 .9250

X/CV

.000	.7314	.6168	.5972	.5382	.5633
.025	.0995	-.2110	-.4521	-.5200	-.4870
.050	.2100	-.1835	-.3798	-.5217	-.4667
.150	.2188	.0699	-.0377	-.1037	-.1898
.300	.0707	.0016	.0000	-.0411	-.0331
.520	-.0801	-.0887	-.1087	-.0704	-.0841
.685	-.4194	-.7169	-.6942	-.6708	-.7115
.775	-.3215	-.4811	-.6726	-.7115	-.7245
.900		-.3728	-.7049	-.7048	-.6784

ALPHA0( 1) = -6.167 BETA0 ( 5) = 4.163

SECTION ( 1) LEFT VERTICAL DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .6020 .8390 .9250

X/CV

.000	.6694	.5477	.5202	.4389	.4871
.025	-.0029	-.3129	-.4994	-.7825	-.7534
.050	-.0012	-.2977	-.5450	-.7871	-.7421
.150	.0853	-.1050	-.2832	-.4521	-.6937
.300	.0232	-.0923	.0000	-.2262	-.2263
.520	-.1253	-.1476	-.2246	-.1857	-.1463
.685	-.4486	-.7249	-.6709	-.7001	-.7104
.775	-.3323	-.4927	-.6792	-.7164	-.7411
.900		-.3941	-.7272	-.6994	-.6914

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ARC11-019 1A81 LVAP(ELHL UNSEALD) LEFT VERTICAL

(RETV09)

ALPHA0( 2) = -4.143 BETA0 ( 1) = -6.157

SECTION ( 1) LEFT VERTICAL		DEPENDENT VARIABLE CP			
Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.5756	.4254	.4197	.4719	.3982
.025	.6176	.4914	.4706	.4426	.4135
.050	.5807	.4545	.4253	.4137	.3770
.150	.4335	.3532	.3233	.3020	.2404
.300	.2789	.2432	.0000	.2043	.1194
.520	.0888	.0733	.0470	.0207	-.0465
.685	-.3781	-.6309	-.6352	-.6464	-.7083
.775	-.2993	-.4231	-.5830	-.6421	-.6983
.900		-.3337	-.5724	-.6378	-.6720

ALPHA0( 2) = -4.132 BETA0 ( 2) = -4.105

SECTION ( 1) LEFT VERTICAL		DEPENDENT VARIABLE CP			
Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.6609	.5246	.5113	.5418	.4921
.025	.5216	.3746	.3543	.3500	.3106
.050	.5081	.3672	.3384	.3314	.3000
.150	.3813	.2804	.2572	.2449	.1931
.300	.2242	.1853	.0000	.1624	.0884
.520	.0458	.0358	.0225	.0063	-.0563
.685	-.3852	-.6485	-.6489	-.6501	-.7137
.775	-.3154	-.4656	-.6058	-.6590	-.7130
.900		-.3483	-.6018	-.6610	-.6663

ALPHA0( 2) = -4.101 BETA0 ( 3) = .017

SECTION ( 1) LEFT VERTICAL		DEPENDENT VARIABLE CP			
Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.7360	.6164	.6039	.5734	.5871
.025	.1845	-.0175	-.1238	-.1427	-.2043
.050	.3469	.1807	-.0780	-.1155	-.1569
.150	.2706	.1213	.0739	.0533	.0455
.300	.1088	.0517	.0000	.0351	.0127
.520	-.0506	-.0551	-.0614	-.0377	-.0756
.685	-.4046	-.6959	-.6866	-.6665	-.7143
.775	-.3174	-.4647	-.6534	-.7014	-.7193
.900		-.3586	-.6753	-.6994	-.6811

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ARC11-019 IA81 LVAP(ELHL UNSEALD) LEFT VERTICAL

(RETV09)

ALPHA0( 2) = -4.075 BETA0 ( 4) = 4.131

SECTION ( 1) LEFT VERTICAL		DEPENDENT VARIABLE CP				
Z/BV	.1580	.3170	.6020	.8390	.9250	
X/CV						
.000	.6493	.5171	.4820	.3980	.4433	
.025	-.0365	-.3290	-.5215	-.7826	-.7678	
.050	-.0372	-.3226	-.5629	-.7886	-.7511	
.150	.0683	-.1288	-.3095	-.4685	-.7018	
.300	-.0009	-.1131	.0000	-.2368	-.2543	
.520	-.1531	-.1708	-.2328	-.2073	-.1679	
.685	-.4507	-.7262	-.6876	-.7054	-.7221	
.775	-.3267	-.4865	-.6902	-.7218	-.7528	
.900		-.4038	-.7136	-.7108	-.7084	

ALPHA0( 2) = -4.067 BETA0 ( 5) = 6.191

SECTION ( 1) LEFT VERTICAL		DEPENDENT VARIABLE CP				
Z/BV	.1580	.3170	.6020	.8390	.9250	
X/CV						
.000	.5499	.4111	.3840	.2924	.3578	
.025	-.1202	-.4090	-.6154	-.7503	-.9585	
.050	-.0982	-.4586	-.6240	-.7745	-.9175	
.150	-.2069	-.2747	-.5182	-.6146	-.8266	
.300	-.0183	-.2418	.0000	-.4850	-.5533	
.520	-.1970	-.2514	-.4354	-.4567	-.3831	
.685	-.4832	-.6636	-.7220	-.7973	-.8151	
.775	-.3362	-.4717	-.7007	-.7820	-.8324	
.900		-.4098	-.6226	-.6298	-.7316	

ALPHA0( 3) = -2.045 BETA0 ( 1) = -6.165

SECTION ( 1) LEFT VERTICAL		DEPENDENT VARIABLE CP				
Z/BV	.1580	.3170	.6020	.8390	.9250	
X/CV						
.000	.5543	.3965	.3835	.4268	.3522	
.025	.5880	.4581	.4291	.4108	.3815	
.050	.5525	.4202	.3855	.3809	.3452	
.150	.4077	.3171	.2925	.2769	.2106	
.300	.2480	.2133	.0000	.1832	.0936	
.520	.0636	.0504	.0238	-.0022	-.0630	
.685	-.3837	-.6377	-.6423	-.6555	-.7130	
.775	-.3069	-.4266	-.5902	-.6485	-.7073	
.900		-.3348	-.5785	-.6472	-.6841	

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## IAB1A - PRESSURE SOURCE DATA TABULATION

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ARC11-019 IAB1 LVAP(ELHL UNSEALED) LEFT VERTICAL

(RETV09)

ALPHA0( 3) = -2.034 BETA0 ( 2) = -2.072

SECTION ( 1) LEFT VERTICAL			DEPENDENT VARIABLE CP		
Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.6895	.5629	.5351	.5316	.5189
.025	.3249	.1797	.1310	.1552	.0991
.050	.3975	.2405	.1754	.1814	.1422
.150	.2958	.1777	.1380	.1350	.0971
.300	.1436	.0860	.0000	.0803	.0255
.520	-.0360	-.0315	-.0370	-.0434	-.0779
.685	-.4205	-.6768	-.6772	-.6681	-.7259
.775	-.3270	-.4739	-.6398	-.6870	-.7268
.900		-.3564	-.6408	-.6903	-.6781

ALPHA0( 3) = -1.993 BETA0 ( 3) = 2.059

SECTION ( 1) LEFT VERTICAL			DEPENDENT VARIABLE CP		
Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.6826	.5557	.5195	.4493	.4754
.025	.0139	-.2540	-.4701	-.5619	-.5201
.050	.1522	-.2337	-.4032	-.5443	-.5032
.150	.1796	.0119	-.0919	-.1188	-.1936
.300	.0234	-.0576	.0000	-.0852	-.0800
.520	-.1434	-.1434	-.1518	-.1149	-.1312
.685	-.4089	-.7006	-.7123	-.6842	-.7284
.775	-.3020	-.4575	-.6867	-.7188	-.7370
.900		-.3796	-.7166	-.7161	-.7025

ALPHA0( 3) = -1.978 BETA0 ( 4) = 6.163

SECTION ( 1) LEFT VERTICAL			DEPENDENT VARIABLE CP		
Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.5235	.3815	.3448	.2513	.3131
.025	-.1531	-.4266	-.6317	-.7511	-.9644
.050	-.1355	-.4828	-.6390	-.7641	-.9265
.150	-.2405	-.3005	-.5375	-.6337	-.8352
.300	-.0410	-.2742	.0000	-.4915	-.5340
.520	-.2280	-.2759	-.4430	-.4804	-.3995
.685	-.4926	-.6483	-.7308	-.7980	-.8269
.775	-.3229	-.4742	-.7122	-.7753	-.8389
.900		-.4127	-.5757	-.5773	-.6981



## ARC11-019 IAB1 LVAP(ELHL UNSEALD) LEFT VERTICAL

(RETV09)

ALPHA0( 4) = .052 BETA0 ( 1) = -6.173

SECTION ( 1) LEFT VERTICAL		DEPENDENT VARIABLE CP				
Z/BV	.1580	.3170	.6020	.8390	.9250	
X/CV						
.000	.5279	.3620	.3442	.3831	.3094	
.025	.5493	.4156	.3895	.3725	.3507	
.050	.5164	.3780	.3462	.3406	.3161	
.150	.3695	.2804	.2565	.2412	.1816	
.300	.2114	.1797	.0000	.1574	.0677	
.520	.0302	.0217	-.0005	-.0298	-.0881	
.685	-.4030	-.6468	-.6555	-.6703	-.7269	
.775	-.3168	-.4447	-.6040	-.6603	-.7206	
.900		-.3347	-.5953	-.6613	-.6999	

ALPHA0( 4) = .055 BETA0 ( 2) = -4.122

SECTION ( 1) LEFT VERTICAL		DEPENDENT VARIABLE CP				
Z/BV	.1580	.3170	.6020	.8390	.9250	
X/CV						
.000	.6064	.4591	.4355	.4471	.3965	
.025	.4483	.2996	.2687	.2737	.2458	
.050	.4412	.2932	.2521	.2574	.2339	
.150	.3128	.2063	.1817	.1771	.1294	
.300	.1551	.1113	.0000	.1076	.0293	
.520	-.0206	-.0242	-.0296	-.0509	-.1031	
.685	-.4100	-.6683	-.6750	-.6831	-.7407	
.775	-.3267	-.4657	-.6315	-.6858	-.7433	
.900		-.3501	-.6335	-.6911	-.7124	

ALPHA0( 4) = .063 BETA0 ( 3) = -.022

SECTION ( 1) LEFT VERTICAL		DEPENDENT VARIABLE CP				
Z/BV	.1580	.3170	.6020	.8390	.9250	
X/CV						
.000	.6915	.5555	.5179	.4756	.4913	
.025	.1078	-.0577	-.1683	-.1823	-.2409	
.050	.2964	.1458	-.1147	-.1673	-.1929	
.150	.2255	.0733	.0117	-.0017	-.0199	
.300	.0661	-.0020	.0000	-.0217	-.0475	
.520	-.1004	-.1040	-.1153	-.0992	-.1309	
.685	-.4300	-.7176	-.7179	-.6978	-.7478	
.775	-.3181	-.4536	-.6802	-.7275	-.7545	
.900		-.3623	-.7096	-.7295	-.7208	

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## 1A81A - PRESSURE SOURCE DATA TABULATION

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ARC11-019 1A81 LVAP(ELHL UNSEALD) LEFT VERTICAL

(RETV09)

ALPHA0( 4) = .079 BETA0( 4) = 4.095

SECTION ( 1) LEFT VERTICAL DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.5942	.4582	.4066	.3126	.3554
.025	-.1105	-.3521	-.5518	-.7643	-.7721
.050	-.0996	-.3728	-.5874	-.7759	-.7574
.150	.0115	-.1819	-.3534	-.5148	-.7114
.300	-.0390	-.1533	.0000	-.2649	-.3051
.520	-.2044	-.2152	-.2496	-.2565	-.1952
.685	-.4708	-.7032	-.7170	-.7144	-.7459
.775	-.3260	-.4855	-.6967	-.7254	-.7612
.900		-.4106	-.5873	-.7248	-.7299

ALPHA0( 4) = .086 BETA0( 5) = 6.161

SECTION ( 1) LEFT VERTICAL DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.4983	.3480	.3055	.2022	.2691
.025	-.1987	-.4413	-.6508	-.7585	-.9704
.050	-.1739	-.4979	-.6591	-.7605	-.9367
.150	-.2818	-.3291	-.5591	-.6431	-.8450
.300	-.0562	-.3045	.0000	-.5025	-.5097
.520	-.2564	-.3048	-.4495	-.5110	-.4173
.685	-.5129	-.6331	-.7415	-.7960	-.8380
.775	-.3283	-.4835	-.7225	-.7707	-.8424
.900		-.4271	-.5461	-.5560	-.6550

ALPHA0( 5) = 2.173 BETA0( 1) = -6.160

SECTION ( 1) LEFT VERTICAL DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.5037	.3321	.3035	.3205	.2584
.025	.5105	.3826	.3514	.3275	.3200
.050	.4830	.3457	.3068	.2985	.2794
.150	.3399	.2418	.2148	.1982	.1494
.300	.1805	.1425	.0000	.1262	.0408
.520	.0059	-.0051	-.0314	-.0555	-.1129
.685	-.4292	-.6612	-.6732	-.6797	-.7354
.775	-.3230	-.4629	-.6166	-.6697	-.7294
.900		-.3387	-.6149	-.6714	-.7091

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## ARC11-019 IAB1 LVAP(ELHL UNSEALED) LEFT VERTICAL

(RETV09)

ALPHA0( 5) = 2.175 BETA0 ( 2) = -2.076

SECTION ( 1) LEFT VERTICAL			DEPENDENT VARIABLE CP		
Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.6538	.4962	.4512	.4396	.4241
.025	.2438	.1087	.0526	.0783	.0362
.050	.3283	.1722	.0940	.1026	.0735
.150	.2353	.1036	.0623	.0616	.0285
.300	.0816	.0186	.0000	.0183	-.0349
.520	-.1081	-.0985	-.0941	-.1003	-.1370
.685	-.3938	-.7062	-.7127	-.7080	-.7572
.775	-.3134	-.4450	-.6714	-.7211	-.7622
.900		-.3610	-.6870	-.7261	-.7282

ALPHA0( 5) = 2.187 BETA0 ( 3) = 2.048

SECTION ( 1) LEFT VERTICAL			DEPENDENT VARIABLE CP		
Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.6430	.4958	.4463	.3681	.3900
.025	-.0875	-.2916	-.4788	-.5486	-.5278
.050	.1319	-.2760	-.3986	-.5380	-.5105
.150	.1319	-.0365	-.1306	-.1463	-.1730
.300	-.0292	-.1030	.0000	-.1323	-.1278
.520	-.1982	-.1852	-.1912	-.1590	-.1780
.685	-.3759	-.6307	-.7328	-.7104	-.7453
.775	-.2855	-.4515	-.7025	-.7353	-.7623
.900		-.4059	-.6304	-.7427	-.7363

ALPHA0( 5) = 2.192 BETA0 ( 4) = 6.163

SECTION ( 1) LEFT VERTICAL			DEPENDENT VARIABLE CP		
Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.4615	.3156	.2635	.1603	.2223
.025	-.2886	-.4634	-.6653	-.7572	-.9732
.050	-.2536	-.5146	-.6763	-.7618	-.9466
.150	-.3140	-.3600	-.5759	-.6508	-.8512
.300	-.0771	-.3393	.0000	-.5214	-.5062
.520	-.2787	-.3267	-.4531	-.5372	-.4401
.685	-.4980	-.6066	-.7512	-.7925	-.8430
.775	-.3130	-.4818	-.7278	-.7385	-.8243
.900		-.4161	-.5134	-.5115	-.5581

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## 1A81A - PRESSURE SOURCE DATA TABULATION

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ARC11-019 1A81 LVAP(ELHL UNSEALD) LEFT VERTICAL

(RETV09)

ALPHA0( 6) = 4.247 BETA0 ( 1) = -6.141

SECTION ( 1) LEFT VERTICAL		DEPENDENT VARIABLE CP			
Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.4870	.3077	.2720	.2806	.2197
.025	.4651	.3466	.3155	.2945	.2889
.050	.4360	.3135	.2680	.2699	.2526
.150	.3094	.2132	.1853	.1701	.1247
.300	.1521	.1115	.0000	.0980	.0180
.520	-.0233	-.0258	-.0507	-.0751	-.1376
.685	-.4639	-.6652	-.6786	-.6831	-.7403
.775	-.3349	-.4728	-.6247	-.6781	-.7330
.900		-.3309	-.6253	-.6741	-.7154

ALPHA0( 6) = 4.249 BETA0 ( 2) = -4.095

SECTION ( 1) LEFT VERTICAL		DEPENDENT VARIABLE CP			
Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.5580	.3952	.3540	.3536	.3059
.025	.3529	.2222	.1987	.2040	.1893
.050	.3576	.2212	.1801	.1881	.1737
.150	.2432	.1352	.1143	.1106	.0707
.300	.0915	.0468	.0000	.0491	-.0207
.520	-.0767	-.0745	-.0805	-.1001	-.1479
.685	-.4420	-.6848	-.6978	-.6990	-.7562
.775	-.3401	-.4625	-.6499	-.7023	-.7591
.900		-.3448	-.6619	-.7033	-.7422

ALPHA0( 6) = 4.254 BETA0 ( 3) = -.002

SECTION ( 1) LEFT VERTICAL		DEPENDENT VARIABLE CP			
Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.6373	.4789	.4318	.3852	.3982
.025	.0491	-.1156	-.2236	-.2304	-.2817
.050	.2416	.0891	-.1869	-.2224	-.2384
.150	.1592	.0070	-.0527	-.0606	-.0776
.300	-.0051	-.0707	.0000	-.0733	-.0997
.520	-.1644	-.1630	-.1648	-.1370	-.1744
.685	-.4383	-.6954	-.7368	-.7196	-.7667
.775	-.3163	-.4602	-.6969	-.7436	-.7761
.900		-.3875	-.6909	-.7493	-.7454

ARC11-019 IAB1 LVAP(ELHL UNSEALD) LEFT VERTICAL

(RETV09)

ALPHA0( 6) = 4.256 BETA0 ( 4) = 4.108

SECTION ( 1) LEFT VERTICAL		DEPENDENT VARIABLE CP			
Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.5496	.3999	.3306	.2330	.2695
.025	-.1851	-.3788	-.5802	-.7548	-.7898
.050	-.1364	-.4177	-.6199	-.7578	-.7724
.150	.0082	-.2240	-.3889	-.5458	-.7191
.300	-.0914	-.1903	.0000	-.2978	-.3098
.520	-.2786	-.2740	-.2799	-.2938	-.2528
.685	-.3537	-.5829	-.7522	-.7318	-.7764
.775	-.3050	-.4663	-.7172	-.7494	-.7740
.900		-.3976	-.4959	-.7571	-.7557

ALPHA0( 6) = 4.255 BETA0 ( 5) = 6.174

SECTION ( 1) LEFT VERTICAL		DEPENDENT VARIABLE CP			
Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.4615	.2968	.2368	.1256	.1837
.025	-.3787	-.5010	-.6595	-.7566	-.9627
.050	-.3103	-.5379	-.6754	-.7596	-.9417
.150	-.1117	-.4099	-.5656	-.6432	-.8430
.300	-.1460	-.3230	.0000	-.5360	-.5214
.520	-.3330	-.3174	-.4671	-.5466	-.4538
.685	-.3455	-.5796	-.7573	-.7778	-.8400
.775	-.3137	-.4851	-.7184	-.7518	-.8290
.900		-.3783	-.5234	-.5303	-.5882

ALPHA0( 7) = 6.369 BETA0 ( 1) = -4.073

SECTION ( 1) LEFT VERTICAL		DEPENDENT VARIABLE CP			
Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.5715	.3760	.3067	.3090	.2675
.025	.3324	.1926	.1517	.1620	.1563
.050	.3452	.1902	.1288	.1487	.1420
.150	.2233	.1003	.0737	.0787	.0417
.300	.0544	.0094	.0000	.0216	-.0466
.520	-.1064	-.1081	-.1025	-.1233	-.1707
.685	-.4752	-.6957	-.7063	-.7066	-.7630
.775	-.3702	-.4933	-.6562	-.7105	-.7667
.900		-.3457	-.6722	-.7069	-.7520

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## IABIA - PRESSURE SOURCE DATA TABULATION

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ARC11-019 IAB1 LVAP(ELHL UNSEALD) LEFT VERTICAL

(RETV09)

ALPHA0 ( 7 ) = 6.370 BETA0 ( 2 ) = -2.035

SECTION ( 1 ) LEFT VERTICAL			DEPENDENT VARIABLE CP		
Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.6321	.4346	.3704	.3461	.3354
.025	.2550	.0534	-.0215	.0071	-.0319
.050	.3072	.1178	.0218	.0344	.0133
.150	.1934	.0447	-.0035	-.0002	-.0276
.300	.0104	-.0474	.0000	-.0384	-.0841
.520	-.1509	-.1396	-.1422	-.1487	-.1783
.685	-.4416	-.7128	-.7291	-.7190	-.7699
.775	-.3308	-.4533	-.6828	-.7306	-.7768
.900		-.3635	-.7071	-.7296	-.7539

ALPHA0 ( 7 ) = 6.369 BETA0 ( 3 ) = .015

SECTION ( 1 ) LEFT VERTICAL			DEPENDENT VARIABLE CP		
Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.6415	.4510	.3877	.3380	.3442
.025	.0480	-.1365	-.2576	-.2634	-.3091
.050	.2364	.0477	-.2208	-.2532	-.2742
.150	.1488	-.0164	-.0814	-.0904	-.1043
.300	-.0324	-.1003	.0000	-.1023	-.1239
.520	-.1866	-.1809	-.1862	-.1615	-.1957
.685	-.4557	-.6643	-.7379	-.7203	-.7675
.775	-.3221	-.4580	-.6985	-.7439	-.7764
.900		-.4039	-.5977	-.7516	-.7499

ALPHA0 ( 7 ) = 6.366 BETA0 ( 4 ) = 2.074

SECTION ( 1 ) LEFT VERTICAL			DEPENDENT VARIABLE CP		
Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.6376	.4347	.3597	.2786	.2995
.025	-.0719	-.2988	-.4897	-.5765	-.5474
.050	.1356	-.3045	-.4397	-.5755	-.5268
.150	.1012	-.0832	-.1750	-.2005	-.2571
.300	-.0790	-.1631	.0000	-.1849	-.1686
.520	-.2468	-.2336	-.2356	-.2021	-.2183
.685	-.4105	-.5905	-.7498	-.7239	-.7597
.775	-.3194	-.4460	-.7140	-.7425	-.7737
.900		-.4159	-.4844	-.7547	-.7518

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IAB1A - PRESSURE SOURCE DATA TABULATION

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ARC11-019 IAB1 LVAP(ELHL UNSEALD) LEFT VERTICAL

(RETV09)

ALPHA0( 7) = 6.365 BETA0 ( 5) = 4.127

SECTION ( 1) LEFT VERTICAL

DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .6020 .8390 .9250

X/CV

.000	.5652	.3838	.2910	.1916	.2346
.025	-.1450	-.3900	-.5881	-.7528	-.7924
.050	-.0835	-.4302	-.6302	-.7521	-.7768
.150	.0452	-.2152	-.4017	-.5101	-.7150
.300	-.1284	-.2106	.0000	-.3252	-.2940
.520	-.3008	-.2915	-.2910	-.2967	-.2751
.685	-.3785	-.5888	-.7627	-.7227	-.7846
.775	-.3268	-.4730	-.7202	-.7456	-.7783
.900	-.3881	-.4799	-.7542	-.7583	

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## IAB1A - PRESSURE SOURCE DATA TABULATION

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ARC11-019 IAB1 LVAP(ELHL SEALED) LEFT VERTICAL

(RETV10) ( 17 OCT 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 976.0000 IN. XT  
 LREF = 1297.0000 INCHES YMRP = .0000 IN. YT  
 BREF = 1297.0000 INCHES ZMRP = 400.0000 IN. ZT  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

MACH = 1.100 RN/FT = 2.250  
 ELV-1B = 8.000 ELV-0B = 4.000  
 RUDDER = .000 SPDBRK = .000

BETA0 ( 1 ) = .019 ALPHA0 ( 1 ) = -6.200

## SECTION ( 1 ) LEFT VERTICAL

## DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .6020 .8390 .9250

## X/CV

.000	.7534	.6439	.6393	.6141	.6227
.025	.2126	.0065	-.1092	-.1235	-.1924
.050	.3717	.1865	-.0509	-.0900	-.1432
.150	.2892	.1498	.0984	.0781	.0679
.300	.1284	.0818	.0000	.0546	.0314
.520	-.0263	-.0436	-.0532	-.0211	-.0582
.685	-.4134	-.6947	-.6837	-.6648	-.7113
.775	-.3303	-.4976	-.6529	-.7000	-.7156
.900		-.3653	-.6728	-.6973	-.6754

BETA0 ( 1 ) = .001 ALPHA0 ( 2 ) = -4.091

## SECTION ( 1 ) LEFT VERTICAL

## DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .6020 .8390 .9250

## X/CV

.000	.7286	.6092	.6001	.5698	.5839
.025	.1763	-.0209	-.1273	-.1489	-.2102
.050	.3418	.1716	-.0823	-.1214	-.1641
.150	.2590	.1163	.0690	.0513	.0426
.300	.1017	.0458	.0000	.0324	.0118
.520	-.0543	-.0671	-.0783	-.0386	-.0763
.685	-.4108	-.6988	-.6913	-.6670	-.7185
.775	-.3264	-.4684	-.6575	-.7012	-.7238
.900		-.3601	-.6780	-.7002	-.6856

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## ARC11-019 1A81 LVAP(ELHL SEALED) LEFT VERTICAL

(RETV10)

BETA0 ( 1 ) = -.016 ALPHA0( 3 ) = -2.000

SECTION ( 1 ) LEFT VERTICAL DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .6020 .8390 .9250

X/CV

.000	.7098	.5795	.5590	.5236	.5398
.025	.1405	-.0440	-.1550	-.1709	-.2305
.050	.3172	.1580	-.1014	-.1481	-.1835
.150	.2406	.0906	.0430	.0255	.0129
.300	.0832	.0211	.0000	.0046	-.0143
.520	-.0787	-.0908	-.1030	-.0643	-.0990
.685	-.4176	-.7058	-.7002	-.6776	-.7270
.775	-.3144	-.4572	-.6647	-.7097	-.7337
.900		-.3615	-.6892	-.7101	-.6982

BETA0 ( 1 ) = -.022 ALPHA0( 4 ) = .085

SECTION ( 1 ) LEFT VERTICAL DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .6020 .8390 .9250

X/CV

.000	.6777	.5498	.5167	.4756	.4918
.025	.0926	-.0717	-.1804	-.1993	-.2566
.050	.2823	.1368	-.1334	-.1834	-.2118
.150	.2141	.0662	.0075	-.0047	-.0208
.300	.0542	-.0070	.0000	-.0220	-.0467
.520	-.1061	-.1171	-.1264	-.0951	-.1286
.685	-.4307	-.7162	-.7142	-.6936	-.7437
.775	-.3220	-.4579	-.6790	-.7241	-.7513
.900		-.3677	-.7066	-.7264	-.7181

BETA0 ( 1 ) = -.019 ALPHA0( 5 ) = 2.189

SECTION ( 1 ) LEFT VERTICAL DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .6020 .8390 .9250

X/CV

.000	.6483	.5113	.4734	.4281	.4429
.025	.0401	-.1078	-.2115	-.2251	-.2746
.050	.2411	.1014	-.1722	-.2165	-.2343
.150	.1757	.0310	-.0263	-.0356	-.0520
.300	.0248	-.0426	.0000	-.0519	-.0717
.520	-.1447	-.1502	-.1532	-.1189	-.1535
.685	-.4370	-.7168	-.7325	-.7087	-.7576
.775	-.3241	-.4620	-.6945	-.7360	-.7672
.900		-.3724	-.7205	-.7406	-.7360

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## IAB1A - PRESSURE SOURCE DATA TABULATION

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ARC11-019 IAB1 LVAP(ELHL SEALED) LEFT VERTICAL

(RETV10)

BETA0 ( 1 ) = -.014 ALPHAO( 6 ) = 4.274

SECTION ( 1 ) LEFT VERTICAL DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.6393	.4807	.4711	.3856	.4023
.025	.0393	-.1204	-.2323	-.2452	-.2942
.050	.2357	.0804	-.2004	-.2349	-.2497
.150	.1584	.0043	-.0521	-.0604	-.0763
.300	-.0029	-.0720	.0000	-.0753	-.0952
.520	-.1656	-.1739	-.1805	-.1327	-.1695
.685	-.4346	-.6929	-.7354	-.7114	-.7588
.775	-.3168	-.4599	-.6965	-.7360	-.7695
.900		-.3873	-.6803	-.7416	-.7389

BETA0 ( 1 ) = .001 ALPHAO( 7 ) = 6.376

SECTION ( 1 ) LEFT VERTICAL DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.6397	.4534	.3874	.3353	.3464
.025	.0453	-.1382	-.2548	-.2644	-.3052
.050	.2347	.0450	-.2207	-.2564	-.2661
.150	.1479	-.0172	-.0838	-.0898	-.1015
.300	-.0336	-.0987	.0000	-.1037	-.1194
.520	-.1882	-.1932	-.2034	-.1588	-.1929
.685	-.4589	-.6710	-.7432	-.7190	-.7673
.775	-.3218	-.4596	-.7038	-.7428	-.7773
.900		-.4069	-.6044	-.7508	-.7494

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IABIA - PRESSURE SOURCE DATA TABULATION

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ARC11-019 IAB1 LVAP(ELHL SEALED) LEFT VERTICAL

(RETV11) ( 17 OCT 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 976-8888 IN. XT  
 LREF = 1297.0000 INCHES YMRP = .0000 IN. YT  
 BREF = 1297.0000 INCHES ZMRP = 400.0000 IN. ZT  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

MACH = 1.250 RN/FT = 2.250  
 ELV-1B = 8.000 ELV-0B = 4.000  
 RUDDER = .000 SPDBRK = .000

ALPHA0 ( 1 ) = -6.258 BETA0 ( 1 ) = -4.078

## SECTION ( 1 ) LEFT VERTICAL

## DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.7308	.6100	.6056	.6369	.5955
.025	.6008	.4918	.4529	.4536	.4265
.050	.5992	.4775	.4360	.4392	.4162
.150	.4893	.3872	.3588	.3591	.3189
.300	.3367	.2890	.0000	.2899	.2243
.520	.1602	.1438	.1322	.1474	.0948
.685	-.3795	-.4642	-.4554	-.4604	-.5136
.775	-.2676	-.4429	-.4326	-.4670	-.5189
.900		-.2796	-.4301	-.4745	-.4967

ALPHA0 ( 1 ) = -6.244 BETA0 ( 2 ) = -2.027

## SECTION ( 1 ) LEFT VERTICAL

## DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.7841	.6804	.6659	.6684	.6588
.025	.4679	.3304	.2634	.2915	.2414
.050	.5293	.3810	.3093	.3171	.2852
.150	.4344	.3121	.2728	.2715	.2433
.300	.2789	.2228	.0000	.2272	.1807
.520	.1138	.1032	.0907	.1241	.0881
.685	-.3857	-.4853	-.4697	-.4676	-.5145
.775	-.2816	-.4716	-.4516	-.4832	-.5205
.900		-.3061	-.4585	-.4917	-.4826

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## IABIA - PRESSURE SOURCE DATA TABULATION

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ARC11-019 IAB1 LVAP(ELHL SEALED) LEFT VERTICAL

(RETV11)

ALPHA0( 1) = -6.209 BETA0 ( 3) = .049

SECTION ( 1)LEFT VERTICAL DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .6020 .8390 .9250

X/CV

.000	.8001	.7068	.6836	.6577	.6768
.025	.2296	.0848	-.0277	-.0449	-.0825
.050	.4222	.2834	.0039	-.0189	-.0437
.150	.3703	.2232	.1638	.1707	.1538
.300	.2194	.1466	.0000	.1506	.1322
.520	.0558	.0440	.0458	.0931	.0659
.685	-.3654	-.5137	-.4959	-.4759	-.5144
.775	-.2775	-.4978	-.4787	-.5047	-.5238
.900		-.3132	-.4956	-.5088	-.4959

ALPHA0( 1) = -6.193 BETA0 ( 4) = 2.114

SECTION ( 1)LEFT VERTICAL DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .6020 .8390 .9250

X/CV

.000	.7785	.6762	.6516	.5960	.6231
.025	.1319	-.1192	-.3183	-.4131	-.4290
.050	.1676	-.1116	-.2901	-.4215	-.4118
.150	.2983	.1506	.0220	-.0390	-.0996
.300	.1625	.0786	.0000	.0470	.0669
.520	.0035	-.0121	-.0168	.0356	.0334
.685	-.3576	-.5332	-.5000	-.4800	-.5153
.775	-.2674	-.4719	-.4947	-.5103	-.5285
.900		-.3145	-.5253	-.5122	-.5025

ALPHA0( 1) = -6.181 BETA0 ( 5) = 4.175

SECTION ( 1)LEFT VERTICAL DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .6020 .8390 .9250

X/CV

.000	.7147	.6053	.5802	.5151	.5643
.025	.0196	-.1939	-.3893	-.5843	-.6896
.050	.0390	-.2185	-.4271	-.5931	-.6186
.150	.0983	-.0341	-.1770	-.4648	-.5125
.300	.1295	-.0191	.0000	-.0739	-.2679
.520	-.0384	-.0629	-.1324	-.0480	.0093
.685	-.3727	-.5469	-.4920	-.5128	-.5208
.775	-.2707	-.4343	-.4974	-.5310	-.5384
.900		-.3399	-.5352	-.5131	-.5115

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## IABIA - PRESSURE SOURCE DATA TABULATION

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ARC11-019 IAB1 LVAP(ELHL SEALED) LEFT VERTICAL

(RETV11)

ALPHA0( 2) = -4.161 BETA0 ( 1) = -6.152

## SECTION ( 1) LEFT VERTICAL

## DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.6400	.5139	.5157	.5467	.4880
.025	.6518	.5607	.5310	.5135	.4958
.050	.6314	.5251	.4888	.4850	.4620
.150	.5114	.4233	.3996	.3892	.3396
.300	.3604	.3191	.0000	.3125	.2342
.520	.1815	.1682	.1451	.1478	.0918
.685	-.3764	-.4475	-.4468	-.4612	-.5094
.775	-.2561	-.4218	-.4181	-.4534	-.5100
.900		-.2700	-.4068	-.4603	-.4935

ALPHA0( 2) = -4.149 BETA0 ( 2) = -4.101

## SECTION ( 1) LEFT VERTICAL

## DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.7017	.5830	.5701	.5968	.5528
.025	.5630	.4534	.4165	.4226	.3992
.050	.5605	.4448	.3959	.4070	.3883
.150	.4595	.3516	.3257	.3299	.2900
.300	.3099	.2576	.0000	.2653	.2007
.520	.1333	.1199	.1140	.1273	.0790
.685	-.3876	-.4720	-.4596	-.4667	-.5145
.775	-.2679	-.4504	-.4356	-.4701	-.5201
.900		-.2887	-.4365	-.4785	-.5024

ALPHA0( 2) = -4.119 BETA0 ( 3) = .013

## SECTION ( 1) LEFT VERTICAL

## DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.7700	.6733	.6432	.6094	.6317
.025	.1914	.0635	-.0514	-.0636	-.1119
.050	.3880	.2601	-.0180	-.0483	-.0704
.150	.3428	.1975	.1382	.1410	.1266
.300	.1907	.1235	.0000	.1239	.1078
.520	.0253	.0192	.0205	.0694	.0440
.685	-.3770	-.5220	-.5060	-.4830	-.5242
.775	-.2810	-.5002	-.4885	-.5105	-.5345
.900		-.3115	-.5078	-.5158	-.5082

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## IAB1A - PRESSURE SOURCE DATA TABULATION

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ARC11-019 IAB1 LVAP(ELHL SEALED) LEFT VERTICAL

(RETV11)

ALPHA( 2) = -4.090 BETA( 4) = 4.141

SECTION ( 1) LEFT VERTICAL

DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.6858	.5737	.5402	.4760	.5220
.025	-.0236	-.2096	-.4069	-.5865	-.6270
.050	-.0003	-.2456	-.4417	-.5943	-.6039
.150	.0873	-.0615	-.2064	-.4266	-.5306
.300	.1058	-.0324	.0000	-.1069	-.1817
.520	-.0640	-.0834	-.1363	-.0727	-.0179
.685	-.3692	-.5609	-.5077	-.5268	-.5334
.775	-.2682	-.4163	-.5058	-.5403	-.5525
.900		-.3284	-.5499	-.5256	-.5350

ALPHA( 2) = -4.088 BETA( 5) = 6.203

SECTION ( 1) LEFT VERTICAL

DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.6129	.4988	.4805	.3935	.4549
.025	-.0838	-.2462	-.4519	-.6277	-.7311
.050	-.0654	-.2888	-.4679	-.6499	-.6992
.150	-.1264	-.1651	-.3509	-.5013	-.6127
.300	.1163	-.1382	.0000	-.3352	-.4550
.520	-.0683	-.1463	-.3090	-.2638	-.2217
.685	-.3748	-.5392	-.5454	-.5921	-.5902
.775	-.2671	-.4331	-.5348	-.6046	-.6118
.900		-.3596	-.5826	-.5731	-.5915

ALPHA( 3) = -2.044 BETA( 1) = -6.169

SECTION ( 1) LEFT VERTICAL

DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.6202	.4811	.4806	.5098	.4517
.025	.6223	.5277	.4859	.4767	.4679
.050	.5991	.4903	.4525	.4489	.4351
.150	.4795	.3889	.3614	.3587	.3145
.300	.3281	.2853	.0000	.2866	.2136
.520	.1587	.1405	.1208	.1275	.0749
.685	-.3833	-.4556	-.4536	-.4624	-.5103
.775	-.2545	-.4309	-.4255	-.4531	-.5131
.900		-.2699	-.4171	-.4633	-.4978

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## IA81A - PRESSURE SOURCE DATA TABULATION

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ARC11-019 IA81 LVAP(ELHL SEALED) LEFT VERTICAL

(RETV11)

ALPHA0( 3) = -2.029 BETA0 ( 2) = -2.075

## SECTION ( 1) LEFT VERTICAL

## DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.7158	.6220	.5871	.5726	.5685
.025	.3335	.2598	.1966	.2164	.1734
.050	.4317	.3164	.2369	.2385	.2209
.150	.3646	.2528	.2063	.2042	.1824
.300	.2306	.1654	.0000	.1670	.1293
.520	.0593	.0462	.0397	.0774	.0421
.685	-.4233	-.5096	-.4951	-.4894	-.5340
.775	-.2797	-.5000	-.4745	-.5010	-.5434
.900		-.3139	-.4870	-.5116	-.5199

ALPHA0( 3) = -2.008 BETA0 ( 3) = 2.060

## SECTION ( 1) LEFT VERTICAL

## DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.7142	.6178	.5717	.5040	.5278
.025	.0421	-.1503	-.3388	-.4227	-.4147
.050	.1461	-.1402	-.2950	-.4221	-.3947
.150	.2501	.0999	-.0258	-.0687	-.2048
.300	.1165	.0289	.0000	-.0055	.0176
.520	-.0521	-.0665	-.0696	-.0165	-.0137
.685	-.3428	-.5570	-.5259	-.5061	-.5410
.775	-.2505	-.4363	-.5175	-.5258	-.5497
.900		-.3213	-.5513	-.5336	-.5300

ALPHA0( 3) = -1.995 BETA0 ( 4) = 6.179

## SECTION ( 1) LEFT VERTICAL

## DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.5899	.4727	.4425	.3552	.4081
.025	-.1045	-.2594	-.4659	-.6291	-.7410
.050	-.0864	-.3039	-.4830	-.6503	-.7119
.150	-.1611	-.1794	-.3668	-.5157	-.6294
.300	.1019	-.1597	.0000	-.3475	-.4618
.520	-.0956	-.1650	-.3057	-.2833	-.2454
.685	-.4067	-.5502	-.5501	-.6044	-.6039
.775	-.2750	-.4321	-.5395	-.6122	-.6202
.900		-.3625	-.5882	-.5834	-.6077

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## IABIA - PRESSURE SOURCE DATA TABULATION

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ARC11-019 IAB1 LVAP(ELHL SEALED) LEFT VERTICAL

(RETV11)

ALPHA0( 4) = .066 BETA0 ( 1) = -6.174

SECTION ( 1) LEFT VERTICAL		DEPENDENT VARIABLE CP				
Z/BV	.1580	.3170	.6020	.8390	.9250	
X/CV						
.000	.5932	.4468	.4346	.4521	.4000	
.025	.5989	.4912	.4493	.4380	.4332	
.050	.5747	.4548	.4070	.4139	.3994	
.150	.4545	.3529	.3250	.3225	.2801	
.300	.2944	.2524	.0000	.2549	.1797	
.520	.1303	.1173	.0960	.0961	.0426	
.685	-.4178	-.4688	-.4701	-.4807	-.5267	
.775	-.2778	-.4485	-.4422	-.4741	-.5292	
.900		-.2901	-.4325	-.4810	-.5148	

ALPHA0( 4) = .072 BETA0 ( 2) = -4.124

SECTION ( 1) LEFT VERTICAL		DEPENDENT VARIABLE CP				
Z/BV	.1580	.3170	.6020	.8390	.9250	
X/CV						
.000	.6350	.5130	.4904	.5087	.4762	
.025	.4799	.3825	.3385	.3442	.3314	
.050	.4834	.3745	.3191	.3320	.3233	
.150	.3837	.2832	.2507	.2623	.2298	
.300	.2383	.1900	.0000	.2073	.1463	
.520	.0699	.0631	.0616	.0781	.0337	
.685	-.4137	-.4982	-.4865	-.4907	-.5385	
.775	-.2736	-.4773	-.4647	-.4904	-.5476	
.900		-.2963	-.4687	-.5033	-.5369	

ALPHA0( 4) = .075 BETA0 ( 3) = -.018

SECTION ( 1) LEFT VERTICAL		DEPENDENT VARIABLE CP				
Z/BV	.1580	.3170	.6020	.8390	.9250	
X/CV						
.000	.7025	.6051	.5649	.5176	.5270	
.025	.1038	.0109	-.0889	-.1061	-.1424	
.050	.3163	.1827	-.0602	-.0952	-.1084	
.150	.2790	.1451	.0824	.0790	.0715	
.300	.1394	.0718	.0000	.0599	.0527	
.520	-.0203	-.0296	-.0281	.0246	-.0003	
.685	-.3991	-.5430	-.5245	-.5027	-.5417	
.775	-.2763	-.4812	-.5076	-.5246	-.5554	
.900		-.3102	-.5313	-.5337	-.5335	

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## IAB1A - PRESSURE SOURCE DATA TABULATION

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ARC11-019 IAB1 LVAP(ELHL SEALED) LEFT VERTICAL

(RETV 1)

ALPHA0( 4) = .088 BETA0 ( 4) = 4.105

SECTION ( 1) LEFT VERTICAL DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .6020 .8390 .9250

X/CV

.000	.6192	.5158	.4668	.3999	.4435
.025	-.0939	-.2422	-.4242	-.5855	-.6176
.050	-.0669	-.2753	-.4461	-.5968	-.6001
.150	.0365	-.1180	-.2439	-.4008	-.5376
.300	.0607	-.0648	.0000	-.1395	-.1280
.520	-.1009	-.1198	-.1495	-.1124	-.0633
.685	-.4010	-.5786	-.5333	-.5355	-.5436
.775	-.2731	-.4211	-.5174	-.5451	-.5620
.900	-.3270	-.5633	-.5389	-.5389	-.5548

ALPHA0( 4) = .092 BETA0 ( 5) = 6.164

SECTION ( 1) LEFT VERTICAL DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .6020 .8390 .9250

X/CV

.000	.5700	.4420	.4069	.3151	.3696
.025	-.1457	-.2754	-.4724	-.6322	-.7394
.050	-.1245	-.3154	-.4899	-.6497	-.7144
.150	-.2007	-.2091	-.3873	-.5283	-.6335
.300	.0849	-.1813	.0000	-.3567	-.4578
.520	-.1175	-.1829	-.3108	-.2979	-.2595
.685	-.4155	-.5548	-.5586	-.6051	-.6120
.775	-.2741	-.4281	-.5470	-.6095	-.6236
.900	-.3723	-.5938	-.5830	-.5830	-.6158

ALPHA0( 5) = 1.116 BETA0 ( 1) = -5.171

SECTION ( 1) LEFT VERTICAL DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .6020 .8390 .9250

X/CV

.000	.5902	.4299	.4200	.4355	.3821
.025	.5858	.4764	.4344	.4215	.4165
.050	.5651	.4414	.3922	.3959	.3834
.150	.4420	.3388	.3095	.3066	.2656
.300	.2827	.2414	.0000	.2413	.1681
.520	.1195	.1061	.0867	.0853	.0328
.685	-.4221	-.4752	-.4729	-.4840	-.5275
.775	-.2736	-.4559	-.4432	-.4777	-.5306
.900	-.2925	-.4366	-.4855	-.4855	-.5172

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## IABIA - PRESSURE SOURCE DATA TABULATION

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ARC11-019 IAB1 LVAP(ELHL SEALED) LEFT VERTICAL

(RETV11)

ALPHA0( 5) = 1.120 BETA0 ( 2) = -2.081

SECTION ( 1) LEFT VERTICAL		DEPENDENT VARIABLE CP			
Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.6673	.5672	.5310	.5086	.5002
.025	.2638	.2059	.1446	.1655	.1188
.050	.3616	.2625	.1848	.1904	.1746
.150	.2987	.2035	.1558	.1561	.1366
.300	.1827	.1197	.0000	.1190	.0913
.520	.0035	.0016	.0075	.0354	.0101
.685	-.3679	-.5241	-.5073	-.4987	-.5414
.775	-.2710	-.4814	-.4858	-.5105	-.5533
.900		-.3132	-.5023	-.5243	-.5361

ALPHA0( 5) = 1.132 BETA0 ( 3) = 2.044

SECTION ( 1) LEFT VERTICAL		DEPENDENT VARIABLE CP			
Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.6528	.5664	.5071	.4413	.4605
.025	-.0621	-.1917	-.3548	-.4191	-.4661
.050	.1332	-.1825	-.3098	-.4169	-.4502
.150	.1972	.0555	-.0533	-.0705	-.0572
.300	.0711	-.0146	.0000	-.0396	-.0324
.520	-.0994	-.1068	-.1015	-.0472	-.0569
.685	-.3278	-.5700	-.5438	-.5285	-.5502
.775	-.2402	-.3958	-.5301	-.5441	-.5677
.900		-.3204	-.5673	-.5566	-.5499

ALPHA0( 5) = 1.141 BETA0 ( 4) = 6.158

SECTION ( 1) LEFT VERTICAL		DEPENDENT VARIABLE CP			
Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.5554	.4180	.3806	.2896	.3360
.025	-.1828	-.2914	-.4867	-.6343	-.7500
.050	-.1627	-.3258	-.5042	-.6506	-.7249
.150	-.2306	-.2334	-.4059	-.5420	-.6482
.300	.0720	-.2055	.0000	-.3681	-.4667
.520	-.1338	-.2043	-.3243	-.3248	-.2760
.685	-.4322	-.5703	-.5718	-.6204	-.6215
.775	-.2076	-.4495	-.5574	-.6210	-.6337
.900		-.3862	-.6002	-.5953	-.6277

## ARC11-019 IA81 LVAP(ELHL SEALED) LEFT VERTICAL

(RETV11)

ALPHA( 6) = 3.217 BETA( 1) = -6.163

SECTION ( 1) LEFT VERTICAL		DEPENDENT VARIABLE CP				
Z/BV	.1580	.3170	.6020	.8390	.9250	
X/CV						
.000	.5762	.3932	.3730	.3889	.3364	
.025	.5514	.4475	.4089	.3924	.3904	
.050	.5285	.4110	.3674	.3687	.3598	
.150	.4101	.3135	.2836	.2820	.2412	
.300	.2583	.2178	.0000	.2174	.1504	
.520	.0995	.0899	.0771	.0647	.0097	
.685	-.4417	-.4807	-.4769	-.4866	-.5337	
.775	-.2772	-.4626	-.4476	-.4826	-.5328	
.900		-.3064	-.4433	-.4888	-.5197	

ALPHA( 6) = 3.218 BETA( 2) = -4.114

SECTION ( 1) LEFT VERTICAL		DEPENDENT VARIABLE CP				
Z/BV	.1580	.3170	.6020	.8390	.9250	
X/CV						
.000	.5965	.4525	.4290	.4441	.4076	
.025	.4290	.3359	.2960	.2942	.2880	
.050	.4369	.3251	.2722	.2826	.2799	
.150	.3426	.2391	.2063	.2136	.1865	
.300	.1996	.1460	.0000	.1626	.1107	
.520	.0363	.0292	.0295	.0448	.0004	
.685	-.4406	-.5104	-.5006	-.5004	-.5484	
.775	-.2859	-.4898	-.4750	-.5042	-.5581	
.900		-.2981	-.4828	-.5145	-.5496	

ALPHA( 6) = 3.223 BETA( 3) = -.012

SECTION ( 1) LEFT VERTICAL		DEPENDENT VARIABLE CP				
Z/BV	.1580	.3170	.6020	.8390	.9250	
X/CV						
.000	.6479	.5411	.4940	.4428	.4523	
.025	.0179	-.0152	-.1159	-.1309	-.1736	
.050	.2552	.1386	-.0990	-.1256	-.1364	
.150	.2222	.1021	.0375	.0321	.0248	
.300	.0970	.0253	.0000	.0187	.0126	
.520	-.0593	-.0718	-.0687	-.0168	-.0399	
.685	-.3913	-.5624	-.5440	-.5203	-.5602	
.775	-.2722	-.4381	-.5256	-.5406	-.5724	
.900		-.3217	-.5509	-.5524	-.5546	

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## 1A81A - PRESSURE SOURCE DATA TABULATION

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ARC11-019 1A81 LVAPIELHL SEALED) LEFT VERTICAL

(RETV11)

ALPHA0( 6) = 3.229 BETA0 ( 4) = 4.104

## SECTION ( 1) LEFT VERTICAL

## DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.5756	.4541	.4152	.3362	.3767
.025	-.1591	-.2820	-.4160	-.5908	-.6127
.050	-.1217	-.3125	-.4372	-.6011	-.6045
.150	-.0372	-.1658	-.2603	-.3974	-.5549
.300	.0193	-.0753	.0000	-.1517	-.1534
.520	-.1452	-.1424	-.1735	-.1472	-.1019
.685	-.3686	-.5845	-.5475	-.5527	-.5622
.775	-.2604	-.4101	-.5303	-.5596	-.5750
.900	-.3377	-.5746	-.5599	-.5678	

ALPHA0( 6) = 3.228 BETA0 ( 5) = 6.167

## SECTION ( 1) LEFT VERTICAL

## DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.5448	.3794	.3418	.2412	.2920
.025	-.2875	-.3485	-.4786	-.6187	-.7477
.050	-.2602	-.3666	-.4948	-.6253	-.7265
.150	-.2541	-.2957	-.4152	-.5436	-.6556
.300	.0155	-.2514	.0000	-.3817	-.4205
.520	-.1617	-.1896	-.3623	-.3637	-.2950
.685	-.3891	-.5800	-.5782	-.6225	-.6329
.775	-.2865	-.4321	-.5573	-.6222	-.6460
.900	-.3725	-.5832	-.6009	-.6351	

ALPHA0( 7) = 5.320 BETA0 ( 1) = -4.097

## SECTION ( 1) LEFT VERTICAL

## DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.5874	.4345	.3965	.3962	.3661
.025	.3942	.3098	.2669	.2622	.2582
.050	.4043	.2997	.2448	.2504	.2473
.150	.3098	.2149	.1822	.1856	.1579
.300	.1671	.1221	.0000	.1367	.0874
.520	.0173	.0115	.0215	.0219	-.0227
.685	-.4569	-.5136	-.5040	-.5050	-.5508
.775	-.2964	-.4971	-.4750	-.5109	-.5611
.900	-.2822	-.4819	-.5202	-.5536	

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ARC11-019 IAB1 LVAP(ELHL SEALED) LEFT VERTICAL

(RETV11)

ALPHA0( 7) = 5.323 BETA0 ( 2) = -2.054

SECTION ( 1) LEFT VERTICAL DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.5727	.5049	.4415	.4061	.3995
.025	.2850	.1641	.0893	.1068	.0737
.050	.3342	.2136	.1243	.1302	.1192
.150	.2720	.1492	.0956	.0952	.0808
.300	.1378	.0622	.0000	.0637	.0362
.520	-.0390	-.0479	-.0292	-.0152	-.0408
.685	-.3629	-.5513	-.5315	-.5201	-.5620
.775	-.2700	-.4534	-.5072	-.5338	-.5757
.900		-.3024	-.5252	-.5438	-.5629

ALPHA0( 7) = 5.325 BETA0 ( 3) = .002

SECTION ( 1) LEFT VERTICAL DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.6485	.5085	.4501	.3939	.4016
.025	.0396	-.0242	-.1286	-.1470	-.1872
.050	.2637	.1075	-.1270	-.1417	-.1550
.150	.2082	.0807	.0124	.0062	-.0012
.300	.0707	.0028	.0000	-.0038	-.0118
.520	-.0807	-.0933	-.0880	-.0386	-.0627
.685	-.3810	-.5665	-.5509	-.5282	-.5656
.775	-.2620	-.4112	-.5291	-.5469	-.5809
.900		-.3129	-.5559	-.5584	-.5634

ALPHA0( 7) = 5.323 BETA0 ( 4) = 2.067

SECTION ( 1) LEFT VERTICAL DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.5980	.5008	.4246	.3499	.3736
.025	.0250	-.1918	-.3502	-.4209	-.5173
.050	.1980	-.1966	-.3113	-.4243	-.4846
.150	.1570	.0185	-.0825	-.1053	-.1000
.300	.0266	-.0495	.0000	-.0838	-.0791
.520	-.1407	-.1464	-.1415	-.0919	-.0975
.685	-.3153	-.5594	-.5624	-.5366	-.5614
.775	-.2572	-.3877	-.5459	-.5509	-.5770
.900		-.3415	-.5786	-.5653	-.5655

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1A81A - PRESSURE SOURCE DATA TABULATION

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ARC11-019 1A81 LVAP(ELHL SEALED) LEFT VERTICAL

(RETV11)

ALPHA0( 7) = 5.325 BETA0 ( 5) = 4.125

SECTION ( 1) LEFT VERTICAL

DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.5622	.4412	.3752	.2934	.3323
.025	-.1699	-.2929	-.4229	-.5902	-.6123
.050	-.0968	-.3138	-.4457	-.5970	-.6029
.150	-.0624	-.1544	-.2682	-.4031	-.5642
.300	-.0037	-.0814	.0000	-.1668	-.1233
.520	-.1756	-.1700	-.1811	-.1679	-.1311
.685	-.3107	-.5586	-.5649	-.5561	-.5709
.775	-.2741	-.3914	-.5484	-.5658	-.5849
.900		-.3381	-.5824	-.5727	-.5740

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## 1A81A - PRESSURE SOURCE DATA TABULATION

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ARC11-019 1A81 LVAP(ELHL SEALED) LEFT VERTICAL

(RETV12) ( 17 OCT 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 976.0000 IN. XT  
 LREF = 1297.0000 INCHES YMRP = .0000 IN. YT  
 BREF = 1297.0000 INCHES ZMRP = 400.0000 IN. ZT  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

MACH = 1.400 RN/FT = 2.250  
 ELV-1B = 8.000 ELV-0B = .000  
 RUDDER = .000 SPDBRK = .000

ALPHA( 1 ) = -6.305 BETA( 1 ) = -4.079

## SECTION ( 1 ) LEFT VERTICAL

## DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.7371	.6492	.6497	.6759	.6444
.025	.6206	.5491	.5042	.4996	.4928
.050	.6150	.5308	.4804	.4880	.4830
.150	.5239	.4358	.4075	.4170	.3875
.300	.3822	.3364	.0000	.3590	.3085
.520	.2178	.2141	.2260	.2359	.2020
.685	-.3053	-.3307	-.3115	-.3184	-.3602
.775	-.2795	-.3365	-.3103	-.3193	-.3724
.900		-.3112	-.3036	-.3343	-.3648

ALPHA( 1 ) = -6.288 BETA( 2 ) = -2.026

## SECTION ( 1 ) LEFT VERTICAL

## DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.7930	.7203	.7008	.7032	.6975
.025	.4849	.3937	.3155	.3386	.2910
.050	.5585	.4345	.3532	.3666	.3431
.150	.4766	.3581	.3180	.3325	.3056
.300	.3278	.2648	.0000	.2921	.2551
.520	.1710	.1639	.1776	.2024	.1763
.685	-.3239	-.3526	-.3301	-.3316	-.3703
.775	-.2741	-.3593	-.3298	-.3432	-.3861
.900		-.3377	-.3334	-.3566	-.3696

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## IABIA - PRESSURE SOURCE DATA TABULATION

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ARC11-019 IAB1 LVAP(ELHL SEALED) LEFT VERTICAL

(RETV12)

ALPHA0( 1) = -6.273 BETA0 ( 3) = .028

SECTION ( 1) LEFT VERTICAL DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.8066	.7527	.7217	.6892	.7092
.025	.2310	.1459	.0434	.0273	-.0247
.050	.4313	.3093	.0644	.0416	.0136
.150	.4112	.2815	.2187	.2290	.2093
.300	.2710	.2044	.0000	.2074	.1914
.520	.1131	.1066	.1251	.1555	.1537
.685	-.3365	-.3770	-.3527	-.3331	-.3657
.775	-.2631	-.3864	-.3509	-.3553	-.3802
.900		-.3484	-.3633	-.3660	-.3620

ALPHA0( 1) = -6.241 BETA0 ( 4) = 2.117

SECTION ( 1) LEFT VERTICAL DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.7881	.7266	.6891	.6406	.6663
.025	.1503	-.0421	-.2253	-.3137	-.3440
.050	.1942	-.0359	-.2478	-.3258	-.3215
.150	.3176	.1940	.0783	.0030	-.1843
.300	.2208	.1384	.0000	.1050	.1262
.520	.0683	.0516	.0570	.0897	.1183
.685	-.3354	-.3956	-.3604	-.3483	-.3708
.775	-.2583	-.4066	-.3680	-.3692	-.3854
.900		-.3352	-.3911	-.3747	-.3735

ALPHA0( 1) = -6.229 BETA0 ( 5) = 4.174

SECTION ( 1) LEFT VERTICAL DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.7174	.6483	.6277	.5619	.6088
.025	.0262	-.1132	-.3329	-.4778	-.5205
.050	.0472	-.1490	-.3565	-.4563	-.5081
.150	.0827	-.0205	-.1412	-.3574	-.3655
.300	.1829	.0290	.0000	-.2061	-.2627
.520	.0308	-.0047	-.0802	.0076	.0131
.685	-.3539	-.4026	-.3762	-.3822	-.3785
.775	-.2736	-.4093	-.3835	-.4016	-.3977
.900		-.3386	-.4120	-.4004	-.3931

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ARC11-019 IA81 LVAP(ELHL SEALED) LEFT VERTICAL

(RETV12)

ALPHA0( 2) = -4.192 BETA0( 1) = -6.158

SECTION ( 1) LEFT VERTICAL		DEPENDENT VARIABLE CP				
Z/BV	.1580	.3170	.6020	.8390	.9250	
X/CV						
.000	.6269	.4877	.5316	.5647	.5169	
.025	.6647	.6087	.5869	.5720	.5719	
.050	.6350	.5685	.5398	.5474	.5385	
.150	.5258	.4620	.4489	.4571	.4212	
.300	.3909	.3620	.0000	.3908	.3261	
.520	.2334	.2361	.2465	.2386	.1940	
.685	-.3018	-.3165	-.3029	-.3137	-.3535	
.775	-.2773	-.3105	-.2934	-.3061	-.3580	
.900		-.2852	-.2779	-.3179	-.3468	

ALPHA0( 2) = -4.180 BETA0( 2) = -4.103

SECTION ( 1) LEFT VERTICAL		DEPENDENT VARIABLE CP				
Z/BV	.1580	.3170	.6020	.8390	.9250	
X/CV						
.000	.7033	.6089	.6042	.6252	.5953	
.025	.5758	.5157	.4706	.4655	.4602	
.050	.5736	.4969	.4445	.4521	.4498	
.150	.4832	.3985	.3742	.3827	.3555	
.300	.3492	.3012	.0000	.3295	.2794	
.520	.1880	.1819	.2005	.2103	.1780	
.685	-.3212	-.3439	-.3256	-.3298	-.3699	
.775	-.2747	-.3496	-.3220	-.3295	-.3815	
.900		-.3232	-.3180	-.3456	-.3748	

ALPHA0( 2) = -4.157 BETA0( 3) = -.002

SECTION ( 1) LEFT VERTICAL		DEPENDENT VARIABLE CP				
Z/BV	.1580	.3170	.6020	.8390	.9250	
X/CV						
.000	.7639	.7165	.6792	.6397	.6472	
.025	.1975	.1209	.0266	.0050	-.0433	
.050	.3927	.2718	.0415	.0083	-.0044	
.150	.3788	.2501	.1951	.1966	.1805	
.300	.2393	.1738	.0000	.1716	.1628	
.520	.0838	.0777	.0965	.1349	.1300	
.685	-.3535	-.3879	-.3639	-.3443	-.3735	
.775	-.2689	-.3977	-.3630	-.3619	-.3905	
.900		-.3542	-.3749	-.3747	-.3738	

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## IABIA - PRESSURE SOURCE DATA TABULATION

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ARC11-019 IAB1 LVAP(ELHL SEALED) LEFT VERTICAL

(RETV12)

ALPHA0( 2) = -4.134 BETA0 ( 4) = 4.138

SECTION ( 1) LEFT VERTICAL

DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .6020 .8390 .9250

X/CV

.000	.6784	.6131	.5831	.5133	.5591
.025	-.0265	-.1410	-.3434	-.4816	-.5317
.050	-.0107	-.1719	-.3635	-.4655	-.5208
.150	.0626	-.0507	-.1685	-.3765	-.3849
.300	.1505	.0104	.0000	-.2061	-.2804
.520	.0017	-.0318	-.0910	-.0188	-.0018
.685	-.3591	-.4190	-.3923	-.3983	-.3901
.775	-.2697	-.4221	-.3953	-.4147	-.4077
.900		-.3343	-.4260	-.4132	-.4102

ALPHA0( 2) = -4.123 BETA0 ( 5) = 6.209

SECTION ( 1) LEFT VERTICAL

DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .6020 .8390 .9250

X/CV

.000	.5967	.4731	.4937	.4115	.4686
.025	-.1400	-.1840	-.3733	-.5175	-.5766
.050	-.1211	-.2023	-.3800	-.5272	-.6022
.150	-.1958	-.1832	-.3228	-.4548	-.4905
.300	.0751	-.1856	.0000	-.3067	-.4064
.520	-.0297	-.1506	-.2814	-.2292	-.2472
.685	-.3684	-.4308	-.4709	-.4947	-.4832
.775	-.2764	-.4265	-.4533	-.5148	-.4981
.900		-.3572	-.4770	-.5069	-.5032

ALPHA0( 3) = -2.103 BETA0 ( 1) = -6.173

SECTION ( 1) LEFT VERTICAL

DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .6020 .8390 .9250

X/CV

.000	.5993	.4574	.4957	.5194	.4728
.025	.5999	.5615	.5461	.5333	.5367
.050	.5822	.5203	.5015	.5066	.5032
.150	.4800	.4246	.4131	.4216	.3864
.300	.3599	.3253	.0000	.3584	.2998
.520	.1992	.2057	.2218	.2128	.1651
.685	-.3238	-.3282	-.3146	-.3251	-.3665
.775	-.2613	-.3249	-.3039	-.3193	-.3686
.900		-.2887	-.2903	-.3309	-.3570

ARC11-019 IAB1 LVAP(ELHL SEALED) LEFT VERTICAL

(RETV12)

ALPHA0( 3) = -2.089 BETA0 ( 2) = -2.072

SECTION ( 1) LEFT VERTICAL

DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.6845	.6572	.6280	.6073	.5976
.025	.3212	.3131	.2491	.2713	.2303
.050	.4331	.3641	.2841	.2965	.2796
.150	.3818	.2947	.2540	.2628	.2461
.300	.2658	.2081	.0000	.2294	.2069
.520	.1159	.1042	.1315	.1521	.1321
.685	-.3612	-.3755	-.3521	-.3478	-.3834
.775	-.2734	-.3828	-.3497	-.3569	-.4010
.900	-.3597	-.3570	-.3733	-.3733	-.3907

ALPHA0( 3) = -2.053 BETA0 ( 3) = 2.068

SECTION ( 1) LEFT VERTICAL

DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.6808	.6576	.6052	.5466	.5684
.025	.0591	-.0791	-.2532	-.3258	-.3576
.050	.1098	-.0856	-.2745	-.3304	-.3418
.150	.2662	.1455	.0219	-.0489	-.1954
.300	.1676	.0878	.0000	.0589	.0700
.520	.0137	.0021	.0094	.0399	.0657
.685	-.3279	-.4230	-.3835	-.3722	-.3880
.775	-.2553	-.4239	-.3884	-.3844	-.4051
.900	-.3225	-.4136	-.3944	-.3944	-.3938

ALPHA0( 3) = -2.034 BETA0 ( 4) = 6.180

SECTION ( 1) LEFT VERTICAL

DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.5678	.4437	.4575	.3652	.4251
.025	-.1615	-.2253	-.3726	-.5181	-.5778
.050	-.1309	-.2389	-.3820	-.5306	-.6009
.150	-.1788	-.2106	-.3328	-.4589	-.4987
.300	.0150	-.1948	.0000	-.3155	-.4151
.520	-.0541	-.1417	-.2842	-.2463	-.2266
.685	-.3516	-.4382	-.4741	-.4954	-.4887
.775	-.2609	-.4051	-.4543	-.5152	-.5015
.900	-.3291	-.4774	-.5039	-.5103	-.5103

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ARC11-019 IAB1 LVAP(ELHL SEALED) LEFT VERTICAL

(RETV12)

ALPHA0( 4) = .003 BETA0 ( 1) = -6.180

SECTION ( 1) LEFT VERTICAL

DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .6020 .8390 .9250

X/CV

.000	.5688	.4225	.4565	.4726	.4327
.025	.5741	.5231	.5105	.4945	.5004
.050	.5562	.4869	.4659	.4690	.4713
.150	.4541	.3909	.3788	.3852	.3580
.300	.3251	.2965	.0000	.3260	.2766
.520	.1778	.1799	.1930	.1942	.1429
.685	-.3292	-.3389	-.3283	-.3334	-.3747
.775	-.2685	-.3341	-.3165	-.3267	-.3738
.900		-.2955	-.3043	-.3373	-.3634

ALPHA0( 4) = .006 BETA0 ( 2) = -4.126

SECTION ( 1) LEFT VERTICAL

DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .6020 .8390 .9250

X/CV

.000	.6357	.5394	.5327	.5312	.5043
.025	.4685	.4338	.3909	.3863	.3820
.050	.4781	.4177	.3702	.3742	.3760
.150	.4006	.3270	.3008	.3093	.2908
.300	.2759	.2338	.0000	.2621	.2263
.520	.1248	.1246	.1477	.1636	.1320
.685	-.3567	-.3707	-.3491	-.3450	-.3842
.775	-.2784	-.3722	-.3442	-.3498	-.3964
.900		-.3476	-.3424	-.3611	-.3924

ALPHA0( 4) = .015 BETA0 ( 3) = -.027

SECTION ( 1) LEFT VERTICAL

DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .6020 .8390 .9250

X/CV

.000	.6599	.6429	.5971	.5485	.5527
.025	.1245	.0765	-.0087	-.0196	-.0641
.050	.3131	.1898	-.0023	-.0166	-.0264
.150	.3131	.1961	.1481	.1475	.1332
.300	.1836	.1256	.0000	.1332	.1201
.520	.0421	.0384	.0518	.0885	.0831
.685	-.3790	-.4052	-.3827	-.3647	-.3966
.775	-.2697	-.4140	-.3790	-.3808	-.4130
.900		-.3398	-.3939	-.3951	-.3996

ARC11-019 IA81 LVAP(ELHL SEALED) LEFT VERTICAL

(RETV12)

ALPHA0( 4) = .024 BETA0 ( 4) = 4.105

SECTION ( 1) LEFT VERTICAL DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .6020 .8390 .9250

X/CV

.000	.6025	.5351	.5005	.4252	.4658
.025	-.0996	-.1581	-.3493	-.4842	-.5455
.050	-.0835	-.1798	-.3697	-.4772	-.5321
.150	.0081	-.0789	-.1968	-.3998	-.4122
.300	.1124	-.0397	.0000	-.1318	-.2906
.520	-.0383	-.0579	-.1044	-.0666	-.0222
.685	-.3868	-.4499	-.4125	-.4229	-.4101
.775	-.2794	-.4423	-.4131	-.4320	-.4296
.900		-.3299	-.4456	-.4335	-.4317

ALPHA0( 4) = .038 BETA0 ( 5) = 6.165

SECTION ( 1) LEFT VERTICAL DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .6020 .8390 .9250

X/CV

.000	.5346	.4100	.4204	.3249	.3775
.025	-.1893	-.2243	-.3816	-.5196	-.5810
.050	-.1643	-.2373	-.3913	-.5345	-.5986
.150	-.2113	-.2156	-.3414	-.4691	-.5071
.300	.0621	-.2049	.0000	-.3293	-.4199
.520	-.0743	-.1554	-.2809	-.2568	-.2204
.685	-.3480	-.4469	-.4764	-.4986	-.4932
.775	-.2521	-.4098	-.4566	-.5165	-.5038
.900		-.3305	-.4816	-.4992	-.5135

ALPHA0( 5) = 2.130 BETA0 ( 1) = -6.171

SECTION ( 1) LEFT VERTICAL DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .6020 .8390 .9250

X/CV

.000	.5638	.3899	.4155	.4286	.3909
.025	.5648	.4925	.4735	.4563	.4652
.050	.5407	.4551	.4289	.4296	.4394
.150	.4341	.3609	.3457	.3515	.3265
.300	.2904	.2640	.0000	.2938	.2476
.520	.1525	.1647	.1663	.1829	.1204
.685	-.3560	-.3365	-.3408	-.3400	-.3837
.775	-.3019	-.3377	-.3265	-.3367	-.3834
.900		-.3295	-.3152	-.3473	-.3728

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ARC11-019 IAB1 LVAP(ELHL SEALED) LEFT VERTICAL

(RETV12)

ALPHA( 5) = 2.133 BETA( 2) = -2.078

SECTION ( 1) LEFT VERTICAL

DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.6242	.5822	.5460	.5086	.4985
.025	.2288	.2362	.1788	.1937	.1621
.050	.3283	.2912	.2162	.2244	.2125
.150	.2872	.2271	.1885	.1934	.1852
.300	.1963	.1466	.0000	.1624	.1460
.520	.0423	.0448	.0752	.1010	.0858
.685	-.3571	-.4005	-.3786	-.3627	-.4019
.775	-.2684	-.4063	-.3734	-.3751	-.4177
.900		-.3406	-.3838	-.3897	-.4131

ALPHA( 5) = 2.141 BETA( 3) = 2.056

SECTION ( 1) LEFT VERTICAL

DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.6078	.5942	.5244	.4637	.4812
.025	-.1006	-.1297	-.2719	-.3162	-.3672
.050	.0792	-.1414	-.2952	-.3171	-.3492
.150	.2099	.0987	.0001	-.0375	-.1538
.300	.1033	.0368	.0000	.0192	.0228
.520	-.0472	-.0439	-.0320	-.0012	.0225
.685	-.2863	-.4377	-.4056	-.3906	-.4082
.775	-.2455	-.4174	-.4038	-.4027	-.4243
.900		-.2989	-.4274	-.4152	-.4152

ALPHA( 5) = 2.152 BETA( 4) = 6.169

SECTION ( 1) LEFT VERTICAL

DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.5397	.3762	.3847	.2842	.3328
.025	-.2457	-.2478	-.3761	-.5168	-.5860
.050	-.2286	-.2620	-.3886	-.5314	-.5942
.150	-.2630	-.2424	-.3390	-.4736	-.5182
.300	.0892	-.2266	.0000	-.3345	-.4248
.520	-.0991	-.1561	-.2880	-.2663	-.2282
.685	-.3662	-.4490	-.4806	-.5072	-.5033
.775	-.2472	-.4177	-.4572	-.5185	-.5133
.900		-.3254	-.4797	-.5024	-.5215

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## ARC11-019 IAB1 LVAP(ELHL SEALED) LEFT VERTICAL

(RETV12)

ALPHA( 6) = 4.219 BETA( 1) = -6.158

SECTION ( 1) LEFT VERTICAL		DEPENDENT VARIABLE CP				
Z/BV	.1580	.3170	.6020	.8390	.9250	
X/CV						
.000	.5541	.3579	.3642	.3797	.3414	
.025	.5507	.4695	.4422	.4274	.4332	
.050	.5228	.4289	.3958	.3994	.4089	
.150	.4032	.3290	.3120	.3278	.2991	
.300	.2461	.2294	.0000	.2701	.2176	
.520	.1193	.1422	.1499	.1449	.0950	
.685	-.3683	-.3520	-.3448	-.3523	-.3934	
.775	-.3057	-.3514	-.3268	-.3475	-.3916	
.900		-.3441	-.3159	-.3572	-.3809	

ALPHA( 6) = 4.218 BETA( 2) = -4.108

SECTION ( 1) LEFT VERTICAL		DEPENDENT VARIABLE CP				
Z/BV	.1580	.3170	.6020	.8390	.9250	
X/CV						
.000	.5832	.4473	.4521	.4351	.4116	
.025	.4340	.3671	.3322	.3198	.3143	
.050	.4408	.3520	.3079	.3064	.3137	
.150	.3575	.2688	.2417	.2496	.2317	
.300	.2265	.1841	.0000	.2062	.1764	
.520	.0910	.0845	.1003	.1187	.0816	
.685	-.3872	-.3785	-.3666	-.3611	-.3982	
.775	-.2863	-.3724	-.3572	-.3648	-.4064	
.900		-.3420	-.3572	-.3772	-.4021	

ALPHA( 6) = 4.224 BETA( 3) = -.013

SECTION ( 1) LEFT VERTICAL		DEPENDENT VARIABLE CP				
Z/BV	.1580	.3170	.6020	.8390	.9250	
X/CV						
.000	.5902	.5583	.5111	.4531	.4529	
.025	-.0356	.0315	-.0409	-.0585	-.0987	
.050	.2170	.1143	-.0497	-.0612	-.0705	
.150	.2334	.1503	.0923	.0932	.0800	
.300	.1295	.0771	.0000	.0814	.0624	
.520	-.0004	-.0103	.0049	.0380	.0320	
.685	-.3825	-.4232	-.4008	-.3881	-.4130	
.775	-.2641	-.4314	-.3953	-.4006	-.4306	
.900		-.3110	-.4126	-.4155	-.4218	

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ARC11-019 IAB1 LVAP(ELHL SEALED) LEFT VERTICAL

(RETV12)

ALPHA0( 6) = 4.226 BETA0 ( 4) = 4.116

SECTION ( 1)LEFT VERTICAL		DEPENDENT VARIABLE CP			
Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.5578	.4491	.4229	.3388	.3785
.025	-.1699	-.2089	-.3557	-.4810	-.5477
.050	-.1205	-.2271	-.3715	-.4829	-.5304
.150	-.0346	-.1376	-.2143	-.4155	-.4312
.300	.0532	-.0490	.0000	-.1564	-.2846
.520	-.0967	-.0984	-.1351	-.1131	-.0676
.685	-.3223	-.4716	-.4279	-.4297	-.4281
.775	-.2515	-.4079	-.4258	-.4427	-.4433
.900		-.3093	-.4562	-.4448	-.4421

ALPHA0( 6) = 4.218 BETA0 ( 5) = 6.193

SECTION ( 1)LEFT VERTICAL		DEPENDENT VARIABLE CP			
Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.5177	.3545	.3372	.2416	.2919
.025	-.2939	-.3174	-.3598	-.4941	-.5816
.050	-.2958	-.3283	-.3705	-.5041	-.5794
.150	-.3292	-.2956	-.3271	-.4968	-.5233
.300	.0431	-.2710	.0000	-.3156	-.3722
.520	-.1322	-.1435	-.3214	-.2973	-.2354
.685	-.3533	-.4488	-.4831	-.5084	-.5081
.775	-.2513	-.4200	-.4555	-.5172	-.5191
.900		-.3162	-.4786	-.5027	-.5203

ALPHA0( 7) = 6.323 BETA0 ( 1) = -4.082

SECTION ( 1)LEFT VERTICAL		DEPENDENT VARIABLE CP			
Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.5860	.4287	.4051	.3881	.3608
.025	.3807	.3398	.2838	.2863	.2799
.050	.3915	.3253	.2668	.2698	.2775
.150	.3188	.2425	.2036	.2145	.1981
.300	.2039	.1589	.0000	.1747	.1439
.520	.0621	.0598	.0726	.0840	.0474
.685	-.4122	-.3928	-.3834	-.3803	-.4159
.775	-.3032	-.3950	-.3688	-.3840	-.4226
.900		-.3670	-.3649	-.3952	-.4184

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## ARC11-019 IA81 LVAP(ELML SEALED) LEFT VERTICAL

(RETV12)

ALPHA( 7) = 6.327 BETA( 2) = -2.045

SECTION ( 1) LEFT VERTICAL		DEPENDENT VARIABLE CP				
Z/BV	.1580	.3170	.6020	.8390	.9250	
X/CV						
.000	.6244	.4992	.4643	.4175	.4036	
.025	.1986	.1896	.1346	.1492	.1130	
.050	.3086	.2385	.1665	.1729	.1581	
.150	.2658	.1826	.1355	.1425	.1283	
.300	.1574	.1081	.0000	.1124	.0936	
.520	.0136	.0142	.0313	.0500	.0320	
.685	-.4005	-.4091	-.3985	-.3883	-.4224	
.775	-.2908	-.4170	-.3900	-.3986	-.4385	
.900	-.3532	-.4000	-.4144	-.4367		

ALPHA( 7) = 6.326 BETA( 3) = .008

SECTION ( 1) LEFT VERTICAL		DEPENDENT VARIABLE CP				
Z/BV	.1580	.3170	.6020	.8390	.9250	
X/CV						
.000	.5557	.5254	.4646	.4087	.4082	
.025	-.0544	.0193	-.0598	-.0747	-.1149	
.050	.2260	.0852	-.0677	-.0790	-.0879	
.150	.2319	.1273	.0653	.0657	.0538	
.300	.1134	.0550	.0000	.0523	.0407	
.520	-.0163	-.0279	-.0158	.0149	.0118	
.685	-.3990	-.4323	-.4138	-.3979	-.4235	
.775	-.2761	-.4360	-.4068	-.4107	-.4417	
.900	-.3041	-.4247	-.4253	-.4347		

ALPHA( 7) = 6.323 BETA( 4) = 2.079

SECTION ( 1) LEFT VERTICAL		DEPENDENT VARIABLE CP				
Z/BV	.1580	.3170	.6020	.8390	.9250	
X/CV						
.000	.6000	.5127	.4388	.3681	.3870	
.025	.0450	-.1118	-.2604	-.3159	-.3958	
.050	.2037	-.1300	-.2743	-.3223	-.3736	
.150	.1821	.0622	-.0246	-.0501	-.0605	
.300	.0590	-.0009	.0000	-.0237	-.0185	
.520	-.0796	-.0831	-.0737	-.0444	-.0316	
.685	-.2986	-.4607	-.4303	-.4113	-.4289	
.775	-.2547	-.3963	-.4243	-.4247	-.4459	
.900	-.2968	-.4479	-.4390	-.4383		

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ARC11-019 IAB1 LVAP(ELHL SEALED) LEFT VERTICAL

(RETV12)

ALPHA0( 7) = 6.317 BETA0 ( 5) = 4.142

SECTION ( 1) LEFT VERTICAL	DEPENDENT VARIABLE CP				
Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.5668	.4314	.3792	.2933	.3330
.025	-.1366	-.2210	-.3624	-.4824	-.5546
.050	-.0714	-.2417	-.3819	-.4876	-.5324
.150	.0703	-.1260	-.2160	-.4080	-.4467
.300	.0149	-.0647	.0000	-.1771	-.2359
.520	-.1301	-.1291	-.1446	-.1299	-.0865
.685	-.3033	-.4803	-.4442	-.4367	-.4416
.775	-.2822	-.3691	-.4399	-.4476	-.4534
.900		-.3004	-.4706	-.4540	-.4495

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## 1A81A - PRESSURE SOURCE DATA TABULATION

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ARC11-019 1A81 LVAP(ELHL SEALED) LEFT VERTICAL

(RETV13) ( 17 OCT 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 976.0000 IN. XT  
 LREF = 1297.0000 INCHES YMRP = .0000 IN. YT  
 BREF = 1297.0000 INCHES ZMRP = 400.0000 IN. ZT  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

MACH = .600 RN/FT = 2.250  
 ELV-18 = 8.000 ELV-08 = .000  
 RUDDER = .000 SPDBRK = .000

ALPHA0( 1) = -6.055 BETA0 ( 1) = -.005

## SECTION ( 1) LEFT VERTICAL

## DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.5128	.4755	.5155	.5100	.5143
.025	-.0817	-.2587	-.3107	-.3494	-.3923
.050	.0825	-.0085	-.2018	-.1076	-.2868
.150	.0171	-.0593	-.0930	-.1197	-.1124
.300	-.0935	-.1248	.0000	-.1545	-.1616
.520	-.2546	-.2910	-.3973	-.3139	-.3240
.685	-.2413	-.3182	-.3802	-.3682	-.3154
.775	-.1876	-.2160	-.2235	-.2054	-.1631
.900		-.1439	-.1147	-.0722	-.0435

ALPHA0( 2) = -4.020 BETA0 ( 1) = -4.064

## SECTION ( 1) LEFT VERTICAL

## DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.3300	.2058	.2486	.3564	.2910
.025	.3048	.2379	.2552	.2511	.1999
.050	.2803	.2063	.2203	.2098	.1807
.150	.1429	.1077	.1052	.0864	.0488
.300	.0137	-.0069	.0000	-.0205	-.0564
.520	-.1947	-.2230	-.2795	-.2105	-.2337
.685	-.2412	-.2806	-.3112	-.2881	-.2889
.775	-.1778	-.1998	-.1928	-.1813	-.1578
.900		-.1534	-.1147	-.0736	-.0744

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## IAB1A - PRESSURE SOURCE DATA TABULATION

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ARC11-019 IAB1 LVAP(ELHL SEALED) LEFT VERTICAL

(RETV13)

ALPHA0( 2) = -3.985 BETA0 ( 2) = .001

SECTION ( 1)LEFT VERTICAL		DEPENDENT VARIABLE CP				
Z/BV	.1580	.3170	.6020	.8390	.9250	
X/CV						
.000	.4885	.4443	.4869	.4734	.4825	
.025	-.1097	-.2775	-.3244	-.3475	-.3878	
.050	.0480	-.0323	-.2086	-.1369	-.2773	
.150	-.0054	-.0707	-.1058	-.1293	-.1209	
.300	-.1112	-.1319	.0000	-.1599	-.1679	
.520	-.2607	-.2918	-.3921	-.3083	-.2968	
.685	-.2389	-.3199	-.3771	-.3548	-.3073	
.775	-.1915	-.2146	-.2226	-.2008	-.1554	
.900		-.1474	-.1163	-.0674	-.0299	

ALPHA0( 2) = -3.974 BETA0 ( 3) = 4.077

SECTION ( 1)LEFT VERTICAL		DEPENDENT VARIABLE CP				
Z/BV	.1580	.3170	.6020	.8390	.9250	
X/CV						
.000	.3093	.1659	.1779	.0756	.2001	
.025	-.4797	-.6879	-.7299	-.7652	-.7074	
.050	-.4920	-.6781	-.7207	-.7394	-.6973	
.150	-.2654	-.5050	-.6320	-.6660	-.6320	
.300	-.2306	-.2647	.0000	-.4680	-.4632	
.520	-.3201	-.3578	-.4721	-.3872	-.3811	
.685	-.2556	-.3446	-.4009	-.3559	-.3099	
.775	-.2132	-.2404	-.2464	-.2189	-.1883	
.900		-.1666	-.1283	-.0905	-.0832	

ALPHA0( 3) = .096 BETA0 ( 1) = -6.101

SECTION ( 1)LEFT VERTICAL		DEPENDENT VARIABLE CP				
Z/BV	.1580	.3170	.6020	.8390	.9250	
X/CV						
.000	.0908	-.1195	-.0595	.0606	.0174	
.025	.3723	.3312	.3595	.3387	.3000	
.050	.3207	.2723	.2918	.2935	.2500	
.150	.1828	.1508	.1658	.1503	.1069	
.300	.0458	.0335	.0000	.0268	-.0305	
.520	-.1648	-.1803	-.2284	-.1664	-.1885	
.685	-.2264	-.2671	-.2715	-.2534	-.2738	
.775	-.1622	-.1938	-.1755	-.1772	-.1729	
.900		-.1431	-.1174	-.0933	-.1135	

ARC11-019 IA81 LVA (ELHL SEALED) LEFT VERTICAL

(RETV13)

ALPHA( 3) = .098 BETA( 2) = -4.070

SECTION ( 1) LEFT VERTICAL		DEPENDENT VARIABLE CP			
Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.2843	.1475	.1877	.2849	.2182
.025	.2606	.2051	.2322	.2219	.1805
.050	.2386	.1742	.1867	.1910	.1583
.150	.1114	.0749	.0811	.0717	.0418
.300	-.0138	-.0234	.0000	-.0310	-.0701
.520	-.1970	-.2231	-.2711	-.2052	-.2192
.685	-.2353	-.2800	-.3036	-.2594	-.2433
.775	-.1735	-.1993	-.1874	-.1691	-.1502
.900		-.1507	-.1064	-.0675	-.0678

ALPHA( 3) = .086 BETA( 3) = -.016

SECTION ( 1) LEFT VERTICAL		DEPENDENT VARIABLE CP			
Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.4492	.3974	.4284	.4133	.4175
.025	-.1426	-.3005	-.3152	-.3221	-.3761
.050	.0163	-.0579	-.2143	-.1855	-.2592
.150	-.0454	-.0944	-.1160	-.1334	-.1253
.300	-.1342	-.1500	.0000	-.1597	-.1648
.520	-.2649	-.2890	-.3840	-.2956	-.2807
.685	-.2372	-.3106	-.3649	-.3407	-.2865
.775	-.1854	-.2138	-.2143	-.1904	-.1498
.900		-.1444	-.1153	-.0663	-.0372

ALPHA( 3) = .117 BETA( 4) = 4.075

SECTION ( 1) LEFT VERTICAL		DEPENDENT VARIABLE CP			
Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.2557	.0994	.1125	-.0002	.1238
.025	-.5149	-.7160	-.7217	-.7332	-.6676
.050	-.5262	-.7134	-.7238	-.7104	-.6513
.150	-.2951	-.5160	-.6600	-.6699	-.6070
.300	-.2593	-.2653	.0000	-.5045	-.5007
.520	-.3156	-.3518	-.4479	-.3670	-.3847
.685	-.2434	-.3335	-.3847	-.3351	-.2995
.775	-.2101	-.2379	-.2443	-.2074	-.1908
.900		-.1692	-.1245	-.0859	-.1018

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## 1A81A - PRESSURE SOURCE DATA TABULATION

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ARC11-019 1A81 LVAP (ELHL SEALED) LEFT VERTICAL

(RETV13)

ALPHA0( 3) = .121 BETA0 ( 5) = 6.104

SECTION ( 1) LEFT VERTICAL DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .6020 .8390 .9250

X/CV

.000	.0423	-.1868	-.1677	-.2279	-.0004
.025	-.7053	-.9280	-.8731	-.7352	-.5448
.050	-.7203	-.9446	-.8715	-.7275	-.5423
.150	-.7811	-.8557	-.8685	-.6893	-.5056
.300	-.2828	-.4368	.0000	-.6587	-.4685
.520	-.3570	-.3699	-.5381	-.5463	-.3937
.685	-.2508	-.3536	-.3942	-.4222	-.3007
.775	-.2219	-.2520	-.2737	-.3601	-.2566
.900		-.1820	-.1695	-.2650	-.1948

ALPHA0( 4) = 4.241 BETA0 ( 1) = -4.062

SECTION ( 1) LEFT VERTICAL DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .6020 .8390 .9250

X/CV

.000	.2600	.1126	.1411	.2275	.1683
.025	.2057	.1674	.2021	.1892	.1516
.050	.1871	.1364	.1599	.1561	.1277
.150	.0712	.0505	.0607	.0475	.0101
.300	-.0461	-.0427	.0000	-.0433	-.0822
.520	-.2065	-.2248	-.2810	-.2049	-.2414
.685	-.2375	-.2773	-.3044	-.2440	-.2639
.775	-.1739	-.2030	-.1938	-.1613	-.1485
.900		-.1607	-.1137	-.0665	-.0626

ALPHA0( 4) = 4.240 BETA0 ( 2) = -.004

SECTION ( 1) LEFT VERTICAL DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .6020 .8390 .9250

X/CV

.000	.4219	.3603	.3787	.3558	.3574
.025	-.1754	-.3145	-.3276	-.3230	-.3841
.050	-.0162	-.0787	-.1890	-.2094	-.2244
.150	-.0642	-.1166	-.1228	-.1355	-.1339
.300	-.1511	-.1630	.0000	-.1579	-.1675
.520	-.2664	-.2858	-.3714	-.2860	-.2804
.685	-.2215	-.3062	-.3424	-.3241	-.2661
.775	-.1827	-.2109	-.2002	-.1822	-.1375
.900		-.1462	-.1059	-.0591	-.0306

ARC11-019 IA81 LVAP(ELHL SEALED) LEFT VERTICAL

(RETV13)

ALPHA0( 4) = 4.238 BETA0 ( 3) = 4.073

SECTION ( 1)LEFT VERTICAL		DEPENDENT VARIABLE CP			
Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.2244	.0472	.0601	-.0615	.0700
.025	-.5288	-.7528	-.6932	-.6815	-.6042
.050	-.4790	-.7554	-.6973	-.6582	-.6021
.150	-.3567	-.4595	-.6479	-.6561	-.5560
.300	-.2652	-.2530	.0000	-.4970	-.5145
.520	-.2976	-.3149	-.4195	-.3234	-.3518
.685	-.1989	-.2997	-.3663	-.2980	-.2478
.775	-.1743	-.2109	-.2271	-.1880	-.1577
.900	-.1815	-.1268	-.0770	-.0770	-.0707

ALPHA0( 5) = 8.385 BETA0 ( 1) = -.010

SECTION ( 1)LEFT VERTICAL		DEPENDENT VARIABLE CP			
Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.3989	.3210	.3337	.3037	.3030
.025	-.1814	-.3150	-.3004	-.3045	-.3528
.050	-.0220	-.0886	-.1644	-.2250	-.2228
.150	-.0793	-.1277	-.1298	-.1354	-.1330
.300	-.1664	-.1670	.0000	-.1563	-.1635
.520	-.2706	-.2785	-.3483	-.2584	-.2812
.685	-.2124	-.3045	-.3243	-.3000	-.2472
.775	-.1835	-.2118	-.1955	-.1670	-.1208
.900	-.1456	-.1007	-.0553	-.0553	-.0173

ALPHA0( 6) = 10.456 BETA0 ( 1) = .002

SECTION ( 1)LEFT VERTICAL		DEPENDENT VARIABLE CP			
Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.3935	.3046	.3080	.2824	.2791
.025	-.1914	-.3215	-.3104	-.3019	-.3613
.050	-.0308	-.1065	-.1566	-.2117	-.2349
.150	-.0933	-.1340	-.1340	-.1395	-.1305
.300	-.1746	-.1761	.0000	-.1556	-.1615
.520	-.2757	-.2854	-.3475	-.2539	-.2564
.685	-.2132	-.3059	-.3244	-.2964	-.2374
.775	-.1772	-.2162	-.1916	-.1650	-.1160
.900	-.1501	-.1014	-.0556	-.0556	-.0181

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ARC11-019 IAB1 LVAP(ELHL SEALED) LEFT VERTICAL

(RETV14) ( 17 OCT 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 976.0000 IN. XT  
 LREF = 1297.0000 INCHES YMRP = .0000 IN. YT  
 BREF = 1297.0000 INCHES ZMRP = 400.0000 IN. ZT  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

MACH = 1.400 RN/FT = 2.250  
 ELV-18 = 8.000 ELV-08 = -4.000  
 RUDDER = .000 SPDBRK = .000

ALPHA0 ( 1 ) = -6.312 BETA0 ( 1 ) = -4.066

## SECTION ( 1 ) LEFT VERTICAL

## DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.7367	.6453	.6685	.6741	.6355
.025	.6149	.5436	.4946	.4959	.4854
.050	.6121	.5256	.4776	.4807	.4784
.150	.5188	.4307	.4057	.4112	.3833
.300	.3805	.3302	.0000	.3558	.3041
.520	.2159	.2086	.2312	.2307	.1990
.685	-.3077	-.3366	-.3174	-.3246	-.3645
.775	-.2872	-.3417	-.3143	-.3237	-.3773
.900		-.3149	-.3085	-.3389	-.3712

ALPHA0 ( 1 ) = -6.295 BETA0 ( 2 ) = -2.013

## SECTION ( 1 ) LEFT VERTICAL

## DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.7913	.7162	.7132	.7007	.6929
.025	.4768	.3799	.3011	.3279	.2851
.050	.5485	.4243	.3493	.3590	.3321
.150	.4687	.3490	.3127	.3215	.2988
.300	.3190	.2565	.0000	.2837	.2507
.520	.1626	.1534	.1784	.1948	.1714
.685	-.3348	-.3652	-.3432	-.3395	-.3794
.775	-.2783	-.3728	-.3429	-.3526	-.3953
.900		-.3414	-.3459	-.3657	-.3785

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## ARC11-019 1A81 LVAP(ELHL SEALED) LEFT VERTICAL

(RETV14)

ALPHA0( 1) = -6.258 BETA0 ( 3) = .056

SECTION ( 1)LEFT VERTICAL DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .6020 .8390 .9250

X/CV

.000	.8019	.7460	.7312	.6827	.7018
.025	.2195	.1357	.0235	.0202	-.0455
.050	.4231	.2924	.0406	.0247	-.0098
.150	.4036	.2712	.2121	.2227	.2007
.300	.2623	.1938	.0000	.1984	.1802
.520	.1053	.0939	.1164	.1430	.1409
.685	-.3445	-.3902	-.3640	-.3493	-.3801
.775	-.2660	-.4005	-.3624	-.3722	-.3939
.900		-.3481	-.3743	-.3820	-.3765

ALPHA0( 1) = -6.244 BETA0 ( 4) = 2.126

SECTION ( 1)LEFT VERTICAL DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .6020 .8390 .9250

X/CV

.000	.7800	.7201	.6977	.6360	.6659
.025	.1451	-.0503	-.2329	-.3239	-.3540
.050	.1860	-.0444	-.2472	-.3315	-.3333
.150	.3107	.1868	.0773	-.0094	-.2028
.300	.2127	.1293	.0000	.1001	.1192
.520	.0607	.0451	.0487	.0826	.1073
.685	-.3431	-.4060	-.3683	-.3592	-.3808
.775	-.2665	-.4154	-.3768	-.3802	-.3970
.900		-.3366	-.4005	-.3863	-.3845

ALPHA0( 1) = -6.233 BETA0 ( 5) = 4.187

SECTION ( 1)LEFT VERTICAL DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .6020 .8390 .9250

X/CV

.000	.7125	.6445	.6299	.5604	.6085
.025	.0225	-.1203	-.3434	-.4896	-.5349
.050	.0414	-.1545	-.3702	-.4671	-.5230
.150	.0762	-.0292	-.1365	-.3671	-.3781
.300	.1718	.0223	.0000	-.2181	-.2756
.520	.0265	-.0112	-.0844	-.0002	.0089
.685	-.3606	-.4159	-.3894	-.3946	-.3900
.775	-.2786	-.4199	-.3943	-.4129	-.4098
.900		-.3467	-.4226	-.4129	-.4056

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## IAB1A - PRESSURE SOURCE DATA TABULATION

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ARC11-019 IAB1 LVAP(ELHL SEALED) LEFT VERTICAL

(RETV14)

ALPHA( 2) = -4.204 BETA( 1) = -6.151

## SECTION ( 1) LEFT VERTICAL

## DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.6250	.4833	.5524	.5640	.5121
.025	.6607	.6061	.5771	.5673	.5676
.050	.6334	.5624	.5329	.5396	.5347
.150	.5221	.4583	.4464	.4497	.4161
.300	.3828	.3541	.0000	.3873	.3200
.520	.2265	.2304	.2487	.2313	.1832
.685	-.3085	-.3224	-.3071	-.3220	-.3629
.775	-.2787	-.3178	-.2995	-.3147	-.3662
.900	-.2904	-.2837	-.3260	-.3543	

ALPHA( 2) = -4.193 BETA( 2) = -4.092

## SECTION ( 1) LEFT VERTICAL

## DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.7040	.6108	.6274	.6238	.5933
.025	.5711	.5120	.4579	.4606	.4547
.050	.5711	.4891	.4418	.4482	.4453
.150	.4823	.3967	.3696	.3782	.3508
.300	.3448	.2975	.0000	.3267	.2765
.520	.1865	.1797	.2050	.2058	.1738
.685	-.3266	-.3483	-.3270	-.3337	-.3739
.775	-.2721	-.3523	-.3243	-.3331	-.3864
.900	-.3261	-.3206	-.3504	-.3797	

ALPHA( 2) = -4.164 BETA( 3) = .031

## SECTION ( 1) LEFT VERTICAL

## DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.7651	.7147	.6909	.6388	.6490
.025	.1890	.1111	.0017	-.0049	-.0543
.050	.3878	.2538	.0246	.0024	-.0174
.150	.3741	.2426	.1853	.1927	.1736
.300	.2346	.1679	.0000	.1704	.1528
.520	.0823	.0716	.0878	.1263	.1229
.685	-.3559	-.3977	-.3718	-.3537	-.3836
.775	-.2675	-.4065	-.3706	-.3717	-.4013
.900	-.3565	-.3831	-.3839	-.3839	

## ARC11-019 1A81 LVAP(ELHL SEALED) LEFT VERTICAL

(RETV14)

ALPHA0( 2) = -4.142 BETA0( 4) = 4.151

SECTION ( 1) LEFT VERTICAL		DEPENDENT VARIABLE CP				
Z/BV	.1580	.3170	.6020	.8390	.9250	
X/CV						
.000	.6798	.6091	.5900	.5111	.5619	
.025	-.0271	-.1462	-.3495	-.4905	-.5416	
.050	-.0116	-.1772	-.3723	-.4756	-.5295	
.150	.0569	-.0585	-.1578	-.3857	-.3939	
.300	.1453	.0000	.0000	-.2017	-.2875	
.520	.0005	-.0357	-.0990	-.0258	-.0076	
.685	-.3620	-.4280	-.3985	-.4073	-.3960	
.775	-.2712	-.4290	-.4040	-.4243	-.4173	
.900	-.3376	-.4338	-.4222	-.4222	-.4198	

ALPHA0( 2) = -4.129 BETA0( 5) = 6.220

SECTION ( 1) LEFT VERTICAL		DEPENDENT VARIABLE CP				
Z/BV	.1580	.3170	.6020	.8390	.9250	
X/CV						
.000	.5936	.4748	.5016	.4118	.4738	
.025	-.1408	-.1882	-.3763	-.5166	-.5801	
.050	-.1197	-.1984	-.3872	-.5287	-.6026	
.150	-.1972	-.1876	-.3188	-.4515	-.4957	
.300	.0669	-.1895	.0000	-.3017	-.4128	
.520	-.0311	-.1529	-.2789	-.2395	-.2475	
.685	-.3649	-.4320	-.4721	-.5027	-.4872	
.775	-.2722	-.4268	-.4554	-.5234	-.5036	
.900	-.3516	-.4779	-.5146	-.5146	-.5079	

ALPHA0( 3) = -2.093 BETA0( 1) = -6.169

SECTION ( 1) LEFT VERTICAL		DEPENDENT VARIABLE CP				
Z/BV	.1580	.3170	.6020	.8390	.9250	
X/CV						
.000	.6005	.4527	.5107	.5177	.4661	
.025	.6101	.5589	.5384	.5289	.5331	
.050	.5884	.5171	.4951	.5034	.5005	
.150	.4806	.4203	.4093	.4157	.3833	
.300	.3545	.3219	.0000	.3539	.2950	
.520	.1989	.2002	.2197	.2082	.1617	
.685	-.3250	-.3340	-.3200	-.3282	-.3702	
.775	-.2605	-.3307	-.3100	-.3236	-.3732	
.900	-.2978	-.2960	-.3346	-.3346	-.3614	

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ARC11-019 IAB1 LVAP(ELHL SCALED) LEFT VERTICAL

(RETV14)

ALPHA0( 3) = -2.078 BETA0 ( 2) = -2.063

SECTION ( 1) LEFT VERTICAL		DEPENDENT VARIABLE CP				
Z/BV	.1580	.3170	.6020	.8390	.9250	
X/CV						
.000	.6837	.6536	.6440	.6025	.5952	
.025	.3182	.3079	.2412	.2639	.2272	
.050	.4277	.3588	.2815	.2913	.2782	
.150	.3731	.2898	.2489	.2575	.2443	
.300	.2595	.2028	.0000	.2242	.2009	
.520	.1090	.0988	.1296	.1478	.1258	
.685	-.3702	-.3830	-.3626	-.3561	-.3937	
.775	-.2820	-.3909	-.3595	-.3653	-.4117	
.900		-.3681	-.3671	-.3815	-.4010	

ALPHA0( 3) = -2.057 BETA0 ( 3) = 2.077

SECTION ( 1) LEFT VERTICAL		DEPENDENT VARIABLE CP				
Z/BV	.1580	.3170	.6020	.8390	.9250	
X/CV						
.000	.6792	.6563	.6171	.5434	.5753	
.025	.0555	-.0861	-.2662	-.3332	-.3643	
.050	.1080	-.0941	-.2759	-.3329	-.3478	
.150	.2626	.1387	.0223	-.0536	-.1883	
.300	.1614	.0830	.0000	.0555	.0712	
.520	.0093	-.0061	.0028	.0398	.0605	
.685	-.3344	-.4326	-.3927	-.3780	-.3945	
.775	-.2609	-.4326	-.3970	-.3920	-.4128	
.900		-.3259	-.4211	-.4024	-.4006	

ALPHA0( 3) = -2.039 BETA0 ( 4) = 6.185

SECTION ( 1) LEFT VERTICAL		DEPENDENT VARIABLE CP				
Z/BV	.1580	.3170	.6020	.8390	.9250	
X/CV						
.000	.5632	.4442	.4619	.3667	.4255	
.025	-.1667	-.2264	-.3851	-.5214	-.5867	
.050	-.1301	-.2444	-.3946	-.5360	-.6049	
.150	-.1751	-.2187	-.3336	-.4598	-.5087	
.300	.0068	-.2029	.0000	-.3184	-.4240	
.520	-.0537	-.1474	-.2858	-.2608	-.2324	
.685	-.3543	-.4455	-.4781	-.5060	-.4944	
.775	-.2605	-.4089	-.4589	-.5267	-.5086	
.900		-.3324	-.4827	-.5130	-.5151	

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ARC11-019 IAB1 LVAP(ELHL SEALED) LEFT VERTICAL

(RETV14)

ALPHA0( 4) = .021 BETA0 ( 1) = -6.181

SECTION ( 1) LEFT VERTICAL		DEPENDENT VARIABLE CP				
Z/BV	.1580	.3170	.6020	.8390	.9250	
X/CV						
.000	.5636	.4125	.4657	.4618	.4205	
.025	.5785	.5220	.5017	.4870	.4982	
.050	.5537	.4817	.4551	.4605	.4671	
.150	.4522	.3829	.3749	.3798	.3514	
.300	.3232	.2878	.0000	.3232	.2698	
.520	.1758	.1730	.1906	.1840	.1353	
.685	-.3369	-.3492	-.3358	-.3424	-.3810	
.775	-.2764	-.3415	-.3230	-.3351	-.3801	
.900		-.3071	-.3126	-.3457	-.3698	

ALPHA0( 4) = .023 BETA0 ( 2) = -4.121

SECTION ( 1) LEFT VERTICAL		DEPENDENT VARIABLE CP				
Z/BV	.1580	.3170	.6020	.8390	.9250	
X/CV						
.000	.6370	.5313	.5493	.5277	.4919	
.025	.4758	.4302	.3818	.3885	.3854	
.050	.4792	.4169	.3659	.3757	.3774	
.150	.3968	.3251	.2992	.3068	.2895	
.300	.2734	.2307	.0000	.2615	.2253	
.520	.1243	.1217	.1497	.1598	.1297	
.685	-.3609	-.3745	-.3516	-.3479	-.3868	
.775	-.2766	-.3757	-.3461	-.3531	-.3999	
.900		-.3492	-.3431	-.3649	-.3951	

ALPHA0( 4) = .027 BETA0 ( 3) = -2.070

SECTION ( 1) LEFT VERTICAL		DEPENDENT VARIABLE CP				
Z/BV	.1580	.3170	.6020	.8390	.9250	
X/CV						
.000	.6466	.6155	.6029	.5567	.5468	
.025	.2490	.2620	.1976	.2241	.1858	
.050	.3682	.3151	.2393	.2542	.2397	
.150	.3213	.2533	.2128	.2241	.2105	
.300	.2214	.1711	.0000	.1893	.1657	
.520	.0717	.0684	.1019	.1221	.1030	
.685	-.3740	-.3952	-.3747	-.3634	-.4000	
.775	-.2818	-.4025	-.3702	-.3729	-.4173	
.900		-.3680	-.3781	-.3890	-.4085	

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ARC11-019 IAB1 LVAP(ELHL SEALED) LEFT VERTICAL

(RETV14)

ALPHA0( 4) = .027 BETA0 ( 4) = -.007

SECTION ( 1)LEFT VERTICAL		DEPENDENT VARIABLE CP			
Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.6599	.6419	.6109	.5462	.5506
.025	.1162	.0578	-.0370	-.0443	-.0930
.050	.3004	.1510	-.0339	-.0443	-.0509
.150	.3060	.1840	.1342	.1357	.1234
.300	.1733	.1147	.0000	.1223	.1081
.520	.0332	.0280	.0414	.0797	.0745
.685	-.3841	-.4178	-.3940	-.3757	-.4041
.775	-.2750	-.4261	-.3898	-.3921	-.4218
.900		-.3473	-.4056	-.4053	-.4080

ALPHA0( 4) = .038 BETA0 ( 5) = 4.112

SECTION ( 1)LEFT VERTICAL		DEPENDENT VARIABLE CP			
Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.6045	.5335	.5148	.4249	.4766
.025	-.1020	-.1634	-.3551	-.4847	-.5508
.050	-.0843	-.1882	-.3747	-.4807	-.5353
.150	.0050	-.0815	-.1909	-.4030	-.4164
.300	.1089	-.0443	.0000	-.1303	-.2905
.520	-.0403	-.0584	-.1092	-.0734	-.0252
.685	-.3861	-.4557	-.4182	-.4277	-.4143
.775	-.2773	-.4460	-.4194	-.4380	-.4356
.900		-.3311	-.4517	-.4371	-.4386

ALPHA0( 4) = .051 BETA0 ( 6) = 6.174

SECTION ( 1)LEFT VERTICAL		DEPENDENT VARIABLE CP			
Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.5329	.4113	.4310	.3287	.3817
.025	-.1882	-.2276	-.3896	-.5190	-.5895
.050	-.1652	-.2406	-.3987	-.5355	-.6044
.150	-.2118	-.2175	-.3369	-.4687	-.5169
.300	.0603	-.2089	.0000	-.3289	-.4281
.520	-.0749	-.1568	-.2805	-.2673	-.2307
.685	-.3492	-.4489	-.4773	-.5098	-.5028
.775	-.2518	-.4075	-.4590	-.5275	-.5129
.900		-.3283	-.4843	-.5098	-.5226

ARC11-019 IAB1 LVAP(ELHL SEALED) LEFT VERTICAL

(RETV14)

ALPHA0( 5) = 2.131 BETA0 ( 1) = -6.166

SECTION ( 1)LEFT VERTICAL			DEPENDENT VARIABLE CP		
Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.5752	.3834	.4267	.4210	.3785
.025	.5610	.4900	.4660	.4514	.4604
.050	.5387	.4491	.4182	.4243	.4299
.150	.4287	.3549	.3382	.3467	.3197
.300	.2854	.2605	.0000	.2886	.2381
.520	.1496	.1574	.1641	.1726	.1123
.685	-.3617	-.3491	-.3446	-.3491	-.3905
.775	-.3019	-.3470	-.3302	-.3448	-.3902
.900		-.3379	-.3190	-.3555	-.3789

ALPHA0( 5) = 2.132 BETA0 ( 2) = -2.063

SECTION ( 1)LEFT VERTICAL			DEPENDENT VARIABLE CP		
Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.6217	.5829	.5641	.5064	.4928
.025	.2031	.2248	.1615	.1810	.1479
.050	.3239	.2810	.2042	.2130	.2031
.150	.2810	.2173	.1792	.1856	.1781
.300	.1876	.1401	.0000	.1557	.1397
.520	.0382	.0363	.0662	.0967	.0784
.685	-.3640	-.4096	-.3877	-.3708	-.4080
.775	-.2777	-.4179	-.3819	-.3827	-.4257
.900		-.3532	-.3913	-.3988	-.4202

ALPHA0( 5) = 2.136 BETA0 ( 3) = 2.064

SECTION ( 1)LEFT VERTICAL			DEPENDENT VARIABLE CP		
Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.6120	.5906	.5360	.4605	.4902
.025	-.1125	-.1379	-.2906	-.3316	-.3809
.050	.0765	-.1491	-.3042	-.3322	-.3623
.150	.2030	.0927	-.0110	-.0536	-.2195
.300	.0982	.0307	.0000	.0158	.0195
.520	-.0542	-.0518	-.0396	-.0027	.0204
.685	-.2904	-.4475	-.4144	-.3955	-.4120
.775	-.2498	-.4204	-.4116	-.4077	-.4296
.900		-.3061	-.4354	-.4202	-.4196

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## IAB1A - PRESSURE SOURCE DATA TABULATION

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ARC11-019 IAB1 LVAP(ELHL SEALED) LEFT VERTICAL

(RETV14)

ALPHA0( 5) = 2.148 BETA0( 4) = 6.175

SECTION ( 1) LEFT VERTICAL		DEPENDENT VARIABLE CP				
Z/BV	.1580	.3170	.6020	.8390	.9250	
X/CV						
.000	.5361	.3774	.3908	.2842	.3363	
.025	-.2545	-.2557	-.3947	-.5235	-.5975	
.050	-.2355	-.2700	-.4039	-.5370	-.6039	
.150	-.2750	-.2485	-.3410	-.4805	-.5306	
.300	.0817	-.2311	.0000	-.3364	-.4347	
.520	-.1012	-.1624	-.2964	-.2768	-.2386	
.685	-.3677	-.4604	-.4900	-.5169	-.5129	
.775	-.2477	-.4167	-.4671	-.5282	-.5218	
.900		-.3300	-.4869	-.5114	-.5291	

ALPHA0( 6) = 4.219 BETA0( 1) = -6.143

SECTION ( 1) LEFT VERTICAL		DEPENDENT VARIABLE CP				
Z/BV	.1580	.3170	.6020	.8390	.9250	
X/CV						
.000	.5630	.3605	.3762	.3731	.3305	
.025	.5515	.4664	.4328	.4215	.4253	
.050	.5258	.4254	.3844	.3944	.4015	
.150	.4015	.3219	.3049	.3186	.2917	
.300	.2428	.2248	.0000	.2613	.2082	
.520	.1179	.1325	.1489	.1347	.0874	
.685	-.3723	-.3615	-.3481	-.3594	-.3984	
.775	-.2940	-.3612	-.3323	-.3551	-.3972	
.900		-.3521	-.3232	-.3640	-.3859	

ALPHA0( 6) = 4.218 BETA0( 2) = -4.089

SECTION ( 1) LEFT VERTICAL		DEPENDENT VARIABLE CP				
Z/BV	.1580	.3170	.6020	.8390	.9250	
X/CV						
.000	.5954	.4527	.4641	.4352	.4058	
.025	.4264	.3560	.3086	.3120	.3038	
.050	.4329	.3417	.2919	.2998	.3029	
.150	.3519	.2587	.2289	.2401	.2255	
.300	.2238	.1729	.0000	.1997	.1661	
.520	.0821	.0734	.0971	.1094	.0720	
.685	-.3955	-.3877	-.3752	-.3719	-.4081	
.775	-.2869	-.3843	-.3646	-.3758	-.4185	
.900		-.3478	-.3652	-.3877	-.4145	



## ARC11-019 IAB1 LVAP(ELHL SEALED) LEFT VERTICAL

(RETV14)

ALPHA( 6) = 4.218 BETA( 3) = .008

## SECTION ( 1) LEFT VERTICAL DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.5898	.5580	.5250	.4482	.4563
.025	-.0447	.0176	-.0672	-.0785	-.1226
.050	.2075	.0747	-.0748	-.0836	-.0943
.150	.2270	.1392	.0797	.0825	.0724
.300	.1231	.0669	.0000	.0687	.0565
.520	-.0072	-.0211	-.0059	.0325	.0235
.685	-.3881	-.4360	-.4116	-.3938	-.4185
.775	-.2699	-.4439	-.4067	-.4063	-.4374
.900		-.3204	-.4244	-.4222	-.4273

ALPHA( 6) = 4.217 BETA( 4) = 4.126

## SECTION ( 1) LEFT VERTICAL DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.5597	.4453	.4295	.3330	.3820
.025	-.1788	-.2175	-.3673	-.4878	-.5632
.050	-.1308	-.2346	-.3831	-.4896	-.5443
.150	-.0533	-.1515	-.2246	-.4245	-.4455
.300	.0514	-.0611	.0000	-.1713	-.2999
.520	-.0998	-.1043	-.1433	-.1300	-.0800
.685	-.3325	-.4778	-.4370	-.4467	-.4424
.775	-.2569	-.4093	-.4330	-.4577	-.4580
.900		-.3159	-.4638	-.4564	-.4564

ALPHA( 6) = 4.218 BETA( 5) = 6.196

## SECTION ( 1) LEFT VERTICAL DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.5161	.3536	.3428	.2372	.2942
.025	-.3013	-.3274	-.3766	-.4993	-.5916
.050	-.3035	-.3355	-.3839	-.5084	-.5892
.150	-.3342	-.3038	-.3309	-.5017	-.5343
.300	.0342	-.2789	.0000	-.3190	-.3781
.520	-.1360	-.1498	-.3273	-.3102	-.2437
.685	-.3435	-.4591	-.4892	-.5194	-.5182
.775	-.2483	-.4177	-.4643	-.5292	-.5276
.900		-.3181	-.4847	-.5100	-.5289

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## 1A81A - PRESSURE SOURCE DATA TABULATION

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ARC11-019 1A81 LVAP(ELHL SEALED) LEFT VERTICAL

(RETV14)

ALPHA( 7) = 6.327 BETA( 1) = -4.066

SECTION ( 1) LEFT VERTICAL		DEPENDENT VARIABLE CP				
Z/BV	.1580	.3170	.6020	.8390	.9250	
X/CV						
.000	.5951	.4414	.4225	.3895	.3577	
.025	.3701	.3322	.2733	.2806	.2669	
.050	.3884	.3207	.2569	.2684	.2675	
.150	.3151	.2380	.1982	.2106	.1916	
.300	.1963	.1540	.0000	.1704	.1383	
.520	.0566	.0560	.0761	.0794	.0456	
.685	-.4145	-.3944	-.3843	-.3819	-.4161	
.775	-.3053	-.3971	-.3694	-.3856	-.4234	
.900		-.3688	-.3648	-.3975	-.4203	

ALPHA( 7) = 6.327 BETA( 2) = -2.029

SECTION ( 1) LEFT VERTICAL		DEPENDENT VARIABLE CP				
Z/BV	.1580	.3170	.6020	.8390	.9250	
X/CV						
.000	.6386	.5066	.4757	.4153	.3993	
.025	.1640	.1739	.1095	.1296	.0954	
.050	.3034	.2326	.1476	.1591	.1418	
.150	.2624	.1741	.1226	.1299	.1183	
.300	.1541	.0964	.0000	.0991	.0814	
.520	.0104	.0018	.0253	.0432	.0252	
.685	-.4083	-.4202	-.4083	-.3949	-.4263	
.775	-.2925	-.4293	-.3985	-.4062	-.4434	
.900		-.3501	-.4098	-.4211	-.4412	

ALPHA( 7) = 6.325 BETA( 3) = .021

SECTION ( 1) LEFT VERTICAL		DEPENDENT VARIABLE CP				
Z/BV	.1580	.3170	.6020	.8390	.9250	
X/CV						
.000	.5512	.5254	.4756	.3994	.4059	
.025	-.0698	.0033	-.0861	-.0968	-.1397	
.050	.2175	.0686	-.0950	-.1017	-.1168	
.150	.2247	.1177	.0548	.0545	.0456	
.300	.1049	.0439	.0000	.0448	.0291	
.520	-.0238	-.0373	-.0291	.0056	-.0002	
.685	-.4053	-.4438	-.4252	-.4090	-.4331	
.775	-.2828	-.4480	-.4181	-.4218	-.4520	
.900		-.3193	-.4361	-.4371	-.4456	

ARC11-019 IAB1 LVAP(ELHL SEALED) LEFT VERTICAL

(RETV14)

ALPHA0( 7) = 6.323 BETA0( 4) = 2.091

SECTION ( 1) LEFT VERTICAL		DEPENDENT VARIABLE CP				
Z/BV	.1580	.3170	.6020	.8390	.9250	
X/CV						
.000	.5912	.5046	.4483	.3599	.3905	
.025	.0076	-.1302	-.2836	-.3403	-.4196	
.050	.1891	-.1466	-.2976	-.3427	-.3943	
.150	.1732	.0513	-.0456	-.0691	-.0842	
.300	.0519	-.0088	.0000	-.0316	-.0298	
.520	-.0892	-.0962	-.0846	-.0543	-.0420	
.685	-.2965	-.4737	-.4402	-.4221	-.4361	
.775	-.2633	-.3960	-.4350	-.4340	-.4550	
.900		-.3025	-.4597	-.4480	-.4480	

ALPHA0( 7) = 6.316 BETA0( 5) = 4.148

SECTION ( 1) LEFT VERTICAL		DEPENDENT VARIABLE CP				
Z/BV	.1580	.3170	.6020	.8390	.9250	
X/CV						
.000	.5602	.4305	.3827	.2859	.3374	
.025	-.1552	-.2332	-.3787	-.4919	-.5691	
.050	-.0894	-.2531	-.3961	-.4974	-.5474	
.150	.0712	-.1459	-.2307	-.4205	-.4626	
.300	.0084	-.0769	.0000	-.1880	-.2630	
.520	-.1372	-.1361	-.1569	-.1446	-.1003	
.685	-.3118	-.4913	-.4529	-.4528	-.4522	
.775	-.2879	-.3754	-.4498	-.4611	-.4638	
.900		-.3104	-.4809	-.4647	-.4623	

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## IABIA - PRESSURE SOURCE DATA TABULATION

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ARC11-019 IAB1 LVAP(ELHL SEALED) LEFT VERTICAL

(RETV15) ( 17 OCT 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 976.0000 IN. XT  
 LREF = 1297.0000 INCHES YMRP = .0000 IN. YT  
 BREF = 1297.0000 INCHES ZMRP = 400.0000 IN. ZT  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

MACH = .900 RN/FT = 2.250  
 ELV-13 = 8.000 ELV-08 = 6.000  
 RUDDER = .000 SPOBRK = .000

ALPHA0( 1) = -6.170 BETA0 ( 1) = -4.069

## SECTION ( 1) LEFT VERTICAL

## DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .6020 .8390 .9250

## X/CV

.000 .4856 .3565 .3964 .4345 .3581  
 .025 .3690 .2325 .2310 .2204 .1574  
 .050 .3432 .2207 .2032 .1953 .1387  
 .150 .1987 .1240 .1038 .0803 .0050  
 .300 .0481 .0097 .0000 -.0329 -.1252  
 .520 -.1695 -.1892 -.2181 -.2588 -.3278  
 .685 -.3440 -.6848 -1.0602 -.7988 -.5721  
 .775 -.2699 -.3175 -.7481 -.6601 -.4874  
 .900 -.2810 -.2747 -.4641 -.3324

ALPHA0( 1) = -6.165 BETA0 ( 2) = -2.034

## SECTION ( 1) LEFT VERTICAL

## DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .6020 .8390 .9250

## X/CV

.000 .5481 .4397 .4858 .4983 .4573  
 .025 .2320 .0424 .0319 .0447 -.0481  
 .050 .2660 .1032 .0659 .0651 .0015  
 .150 .1311 .0387 .0149 -.0066 -.0508  
 .300 -.0214 -.0580 .0000 -.0893 -.1454  
 .520 -.2163 -.2298 -.2483 -.2669 -.3124  
 .685 -.3564 -.5705 -1.0863 -.9211 -.5834  
 .775 -.2718 -.3636 -.8574 -.6201 -.4978  
 .900 -.2936 -.3057 -.4558 -.3491

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ARC11-019 IAB1 LVAP(ELHL SEALED) LEFT VERTICAL

(RETV15)

ALPHA0( 1) = -6.129 BETA0( 3) = .031

## SECTION ( 1) LEFT VERTICAL

## DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.5756	.4708	.5154	.4915	.5002
.025	.0059	-.2299	-.3353	-.3361	-.4336
.050	.1555	-.0150	-.2549	-.3035	-.3688
.150	.0557	-.0638	-.0998	-.1263	-.1433
.300	-.1027	-.1411	.0000	-.1491	-.2001
.520	-.2793	-.2811	-.3122	-.3079	-.3273
.685	-.3651	-.6399	-1.0496	-.6698	-.7266
.775	-.2710	-.3854	-.5466	-.5334	-.3208
.900		-.2993	-.3930	-.4138	-.2263

ALPHA0( 1) = -6.118 BETA0( 4) = 2.093

## SECTION ( 1) LEFT VERTICAL

## DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.5451	.4402	.4565	.4012	.4328
.025	-.1197	-.4822	-.8467	-.8322	-.7201
.050	.0005	-.4323	-.5685	-.7185	-.7003
.150	-.0206	-.1611	-.2582	-.3187	-.3941
.300	-.1734	-.2249	.0000	-.2802	-.2548
.520	-.3253	-.3610	-.3723	-.3459	-.3436
.685	-.3858	-.5197	-.9488	-.6787	-.6962
.775	-.2637	-.4162	-.5124	-.4408	-.3020
.900		-.2960	-.3671	-.3281	-.2129

ALPHA0( 1) = -6.110 BETA0( 5) = 4.138

## SECTION ( 1) LEFT VERTICAL

## DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.4844	.3581	.3508	.2508	.3097
.025	-.2399	-.6156	-.8765	-.9637	-1.1332
.050	-.2452	-.5831	-.9304	-.9829	-1.1116
.150	-.1613	-.3734	-.4980	-.7561	-.9819
.300	-.2304	-.3391	.0000	-.5334	-.5185
.520	-.3835	-.4157	-.5123	-.5287	-.4085
.685	-.4353	-.5123	-.7538	-.3607	-.3270
.775	-.2607	-.4232	-.4447	-.2811	-.2496
.900		-.3281	-.3210	-.2219	-.1715

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## 1A81A - PRESSURE SOURCE DATA TABULATION

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ARC11-019 1A81 LVAP(ELHL SEALED) LEFT VERTICAL

(RETV15)

ALPHA0( 2) = -4.082 BETA0 ( 1) = -6.131

SECTION ( 1) LEFT VERTICAL		DEPENDENT VARIABLE CP				
Z/BV	.1580	.3170	.6020	.8390	.9250	
X/CV						
.000	.3465	.1941	.2283	.2782	.1837	
.025	.4430	.3404	.3415	.3121	.2667	
.050	.3972	.2916	.2889	.2679	.2166	
.150	.2428	.1769	.1647	.1306	.0544	
.300	.0923	.0535	.0000	.0017	-.0886	
.520	-.1330	-.1567	-.2084	-.2404	-.3200	
.685	-.3286	-.6465	-.9901	-1.0014	-.9061	
.775	-.2455	-.2915	-.3895	-.7739	-.6561	
.900		-.2519	-.2446	-.3965	-.4007	

ALPHA0( 2) = -4.072 BETA0 ( 2) = -4.082

SECTION ( 1) LEFT VERTICAL		DEPENDENT VARIABLE CP				
Z/BV	.1580	.3170	.6020	.8390	.9250	
X/CV						
.000	.4545	.3180	.3556	.3866	.3129	
.025	.3301	.2016	.2128	.2072	.1484	
.050	.3131	.1884	.1863	.1810	.1290	
.150	.1656	.0997	.0868	.0629	-.0055	
.300	.0140	-.0113	.0000	-.0453	-.1324	
.520	-.1869	-.2013	-.2271	-.2654	-.3349	
.685	-.3298	-.6677	-1.0323	-.8452	-.5644	
.775	-.2612	-.3126	-.5038	-.6689	-.4686	
.900		-.2717	-.2611	-.4166	-.3163	

ALPHA0( 2) = -4.058 BETA0 ( 3) = .016

SECTION ( 1) LEFT VERTICAL		DEPENDENT VARIABLE CP				
Z/BV	.1580	.3170	.6020	.8390	.9250	
X/CV						
.000	.5494	.4237	.4827	.4615	.4648	
.025	-.0187	-.2576	-.3501	-.3437	-.4376	
.050	.1256	-.0465	-.2716	-.3080	-.3758	
.150	.0189	-.0929	-.1213	-.1354	-.1514	
.300	-.1437	-.1668	.0000	-.1574	-.2087	
.520	-.2998	-.2898	-.3198	-.3174	-.3434	
.685	-.3465	-.5842	-1.0077	-.6913	-.7242	
.775	-.2739	-.3755	-.5144	-.5414	-.3174	
.900		-.2776	-.3528	-.3907	-.2220	

ARC11-019 IAB1 LVAP(ELHL SEALED) LEFT VERTICAL

(RETV15)

ALPHA0( 2) = -4.039 BETA0 ( 4) = 4.120

SECTION ( 1) LEFT VERTICAL		DEPENDENT VARIABLE CP				
Z/BV	.1580	.3170	.6020	.8390	.9250	
X/CV						
.000	.4469	.3181	.3007	.1948	.2546	
.025	-.2882	-.6616	-.9097	-.9729	-1.1075	
.050	-.2890	-.6266	-.9611	-.9840	-1.0663	
.150	-.1762	-.4100	-.5448	-.7745	-.9578	
.300	-.2752	-.3776	.0000	-.5905	-.6049	
.520	-.4292	-.4298	-.5429	-.5537	-.4146	
.685	-.3968	-.4827	-.6537	-.3585	-.2710	
.775	-.2608	-.3909	-.4355	-.2790	-.2068	
.900		-.3163	-.2843	-.2099	-.1518	

ALPHA0( 2) = -4.035 BETA0 ( 5) = 6.171

SECTION ( 1) LEFT VERTICAL		DEPENDENT VARIABLE CP				
Z/BV	.1580	.3170	.6020	.8390	.9250	
X/CV						
.000	.3229	.1896	.1612	.0479	.1216	
.025	-.3723	-.7609	-1.0103	-1.1176	-1.2117	
.050	-.3601	-.8316	-1.0255	-1.1332	-1.2385	
.150	-.5075	-.5706	-.8888	-1.0387	-1.1693	
.300	-.2834	-.5439	.0000	-.6980	-.8130	
.520	-.4676	-.5317	-.7724	-.4564	-.4912	
.685	-.4471	-.5051	-.6388	-.3482	-.3272	
.775	-.2431	-.4046	-.4749	-.2744	-.2705	
.900		-.3448	-.3197	-.2163	-.2072	

ALPHA0( 3) = -2.011 BETA0 ( 1) = -6.134

SECTION ( 1) LEFT VERTICAL		DEPENDENT VARIABLE CP				
Z/BV	.1580	.3170	.6020	.8390	.9250	
X/CV						
.000	.3343	.1702	.2076	.2483	.1478	
.025	.4146	.2973	.3141	.2912	.2521	
.050	.3712	.2581	.2626	.2528	.2049	
.150	.2120	.1522	.1470	.1176	.0404	
.300	.0665	.0355	.0000	-.0007	-.1029	
.520	-.1384	-.1592	-.2074	-.2469	-.3244	
.685	-.3379	-.6287	-.9635	-.9800	-.9331	
.775	-.2447	-.2902	-.3772	-.7365	-.5985	
.900		-.2465	-.2288	-.3740	-.3845	

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ARC11-019 1A81 LVAP(ELHL SEALED) LEFT VERTICAL

(RETV15)

ALPHA0( 3) = -2.000 BETA0 ( 2) = -2.052

SECTION ( 1) LEFT VERTICAL DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.4928	.3599	.4081	.4257	.3866
.025	.1511	-.0379	-.0211	.0300	-.0640
.050	.1871	.0239	.0227	.0395	-.0173
.150	.0553	-.0358	-.0218	-.0324	-.0814
.300	-.0962	-.1230	.0000	-.1130	-.1717
.520	-.2686	-.2597	-.2753	-.2999	-.3367
.685	-.3242	-.5522	-1.0357	-.8321	-.5247
.775	-.2564	-.3352	-.4451	-.5696	-.4563
.900		-.2740	-.2726	-.4114	-.2993

ALPHA0( 3) = -1.985 BETA0 ( 3) = 2.064

SECTION ( 1) LEFT VERTICAL DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.4815	.3620	.3746	.3125	.3486
.025	-.1908	-.5562	-.8469	-.8556	-.6824
.050	-.0557	-.4803	-.6427	-.7567	-.6698
.150	-.0907	-.2390	-.3094	-.3549	-.4825
.300	-.2565	-.2878	.0000	-.2927	-.2841
.520	-.3824	-.3764	-.4014	-.3655	-.3715
.685	-.3339	-.4533	-.6548	-.5889	-.4985
.775	-.2515	-.3753	-.4435	-.4384	-.2887
.900		-.2840	-.2882	-.2921	-.1872

ALPHA0( 3) = -1.973 BETA0 ( 4) = 6.153

SECTION ( 1) LEFT VERTICAL DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.3075	.1522	.1259	-.0030	.0723
.025	-.3975	-.7775	-1.0125	-1.1072	-1.1729
.050	-.3812	-.8510	-1.0311	-1.1091	-1.1718
.150	-.5183	-.6033	-.8866	-1.0023	-1.1002
.300	-.3092	-.5552	.0000	-.6955	-.8438
.520	-.4979	-.5256	-.7739	-.4729	-.5862
.685	-.4233	-.4926	-.6011	-.3454	-.3728
.775	-.2433	-.4020	-.4360	-.2773	-.2755
.900		-.3451	-.3118	-.2282	-.1983

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ARC11-019 IA81 LVAP(ELHL SEALED) LEFT VERTICAL

(RETV15)

ALPHA0( 4) = .079 BETAO ( 1) = -6.140

SECTION ( 1) LEFT VERTICAL		DEPENDENT VARIABLE CP			
Z/BV		.1580	.3170	.6020	.8390 .9250
X/CV					
.000		.3163	.1294	.1436	.1784 .0771
.025		.3858	.2734	.2984	.2734 .2367
.050		.3406	.2308	.2454	.2373 .1847
.150		.1860	.1310	.1291	.0990 .0239
.300		.0408	.0212	.0000	-.0214 -.1196
.520		-.1552	-.1682	-.2292	-.2677 -.3477
.685		-.3327	-.5807	-.8048	-.9276 -.7700
.775		-.2453	-.2799	-.3451	-.5185 -.5465
.900		-.2372	-.2041	-.2325	-.3107

ALPHA0( 4) = .084 BETAO ( 2) = -4.099

SECTION ( 1) LEFT VERTICAL		DEPENDENT VARIABLE CP			
Z/BV		.1580	.3170	.6020	.8390 .9250
X/CV					
.000		.4112	.2383	.2740	.2991 .2282
.025		.2548	.1236	.1740	.1745 .1382
.050		.2376	.1136	.1457	.1478 .1048
.150		.0968	.0396	.0525	.0350 -.0320
.300		-.0451	-.0517	.0000	-.0712 -.1574
.520		-.2162	-.2166	-.2608	-.2912 -.3632
.685		-.3076	-.5572	-.9351	-.7918 -.4918
.775		-.2456	-.2918	-.3927	-.5384 -.4243
.900		-.2388	-.2283	-.3057	-.2896

ALPHA0( 4) = .085 BETAO ( 3) = -.004

SECTION ( 1) LEFT VERTICAL		DEPENDENT VARIABLE CP			
Z/BV		.1580	.3170	.6020	.8390 .9250
X/CV					
.000		.4967	.3574	.4076	.3943 .3969
.025		-.0991	-.3350	-.3764	-.3654 -.4589
.050		.0548	-.1179	-.2930	-.3239 -.3993
.150		-.0515	-.1731	-.1403	-.1588 -.1717
.300		-.2165	-.2313	.0000	-.1805 -.2263
.520		-.3427	-.3052	-.3353	-.3371 -.3649
.685		-.3087	-.4259	-.7516	-.6521 -.5397
.775		-.2470	-.3486	-.4596	-.4833 -.2881
.900		-.2530	-.2701	-.3065	-.1784

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## IAB1A - PRESSURE SOURCE DATA TABULATION

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ARC11-019 IAB1 LVAP(ELHL SEALED) LEFT VERTICAL

(RETV15)

ALPHA( 4) = .097 BETA( 4) = 4.092

SECTION ( 1) LEFT VERTICAL DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .6020 .8390 .9250

X/CV

.000	.3991	.2480	.2152	.1008	.1650
.025	-.3439	-.7046	-.9440	-.9273	-.8493
.050	-.3135	-.6833	-.9897	-.9284	-.8513
.150	-.2298	-.4425	-.6028	-.8242	-.8096
.300	-.3295	-.4207	.0000	-.6572	-.7161
.520	-.4657	-.4105	-.5188	-.5003	-.5450
.685	-.3306	-.4131	-.5272	-.3785	-.3426
.775	-.2344	-.3290	-.3704	-.2712	-.2640
.900		-.3088	-.2537	-.1627	-.1576

ALPHA( 4) = .102 BETA( 5) = 6.138

SECTION ( 1) LEFT VERTICAL DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .6020 .8390 .9250

X/CV

.000	.2892	.1162	.0755	-.0637	.0309
.025	-.4509	-.8075	-1.0351	-.9572	-.7435
.050	-.4306	-.8824	-1.0488	-.9740	-.7454
.150	-.5486	-.6360	-.9107	-.9099	-.7201
.300	-.3447	-.5761	.0000	-.7390	-.6241
.520	-.5215	-.5116	-.7821	-.5939	-.4848
.685	-.3810	-.4533	-.5177	-.4929	-.3919
.775	-.2569	-.3754	-.3857	-.4393	-.3574
.900		-.3171	-.2564	-.3586	-.3092

ALPHA( 5) = 2.176 BETA( 1) = -6.134

SECTION ( 1) LEFT VERTICAL DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .6020 .8390 .9250

X/CV

.000	.3080	.1090	.0985	.1275	.0343
.025	.3442	.2440	.2707	.2535	.2222
.050	.3069	.2051	.2231	.2143	.1717
.150	.1597	.1088	.1149	.0814	.0080
.300	.0221	.0052	.0000	-.0325	-.1298
.520	-.1654	-.1799	-.2385	-.2763	-.3520
.685	-.3347	-.5444	-.6605	-.9128	-.7013
.775	-.2455	-.2846	-.3212	-.4687	-.5058
.900		-.2382	-.2092	-.2078	-.2602

ARC11-019 IAB1 LVAP(ELHL SEALED) LEFT VERTICAL

(RETV15)

ALPHA0( 5) = 2.181 BETA0 ( 2) = -2.059

SECTION ( 1)LEFT VERTICAL DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .6020 .8390 .9250

X/CV

.000	.4117	.2956	.3392	.3655	.3281
.025	.0637	-.1231	-.0401	-.0053	-.0907
.050	.1141	-.0402	-.0088	.0057	-.0490
.150	-.0104	-.0997	-.0428	-.0630	-.1095
.300	-.1628	-.1577	.0000	-.1356	-.2003
.520	-.2820	-.2578	-.2991	-.3256	-.3693
.685	-.2835	-.4694	-.8449	-.7613	-.4728
.775	-.2453	-.2983	-.3984	-.5712	-.4000
.900		-.2410	-.1940	-.2823	-.2260

ALPHA0( 5) = 2.185 BETA0 ( 3) = 2.048

SECTION ( 1)LEFT VERTICAL DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .6020 .8390 .9250

X/CV

.000	.4167	.2998	.2986	.2410	.2728
.025	-.2426	-.6082	-.8089	-.7799	-.6997
.050	-.0650	-.5406	-.7433	-.7280	-.6774
.150	-.1368	-.2990	-.3147	-.3277	-.4653
.300	-.3175	-.3494	.0000	-.3101	-.2896
.520	-.4264	-.3681	-.3922	-.3878	-.3943
.685	-.3221	-.3838	-.5792	-.5159	-.3068
.775	-.2373	-.3208	-.4101	-.3602	-.2232
.900		-.2712	-.2395	-.1814	-.0947

ALPHA0( 5) = 2.183 BETA0 ( 4) = 6.140

SECTION ( 1)LEFT VERTICAL DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .6020 .8390 .9250

X/CV

.000	.2788	.0905	.0268	-.1140	-.0239
.025	-.5028	-.8257	-1.0380	-.9418	-.7203
.050	-.4744	-.9018	-1.0464	-.9627	-.7085
.150	-.5400	-.6703	-.9146	-.8653	-.7047
.300	-.3748	-.5999	.0000	-.7317	-.6082
.520	-.5108	-.4734	-.7718	-.6128	-.4745
.685	-.3263	-.4162	-.4810	-.5189	-.3966
.775	-.2494	-.3753	-.3390	-.4475	-.3658
.900		-.3102	-.2151	-.3696	-.3218

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## IAB1A - PRESSURE SOURCE DATA TABULATION

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ARC11-019 IAB1 LVAP(ELHL SEALED) LEFT VERTICAL

(RETV15)

ALPHA( 6) = 4.251 BETA( 1) = -6.118

SECTION ( 1) LEFT VERTICAL		DEPENDENT VARIABLE CP				
Z/BV	.1580	.3170	.6020	.8390	.9250	
X/CV						
.000	.2948	.0834	.0532	.0810	.0025	
.025	.2883	.2304	.2590	.2475	.2148	
.050	.2635	.1859	.2043	.2145	.1649	
.150	.1322	.0900	.0995	.0864	.0052	
.300	.0046	-.0037	.0000	-.0288	-.1385	
.520	-.1648	-.1799	-.2444	-.2859	-.3560	
.685	-.3137	-.5235	-.5842	-.9033	-.6815	
.775	-.2349	-.2847	-.3223	-.4166	-.4564	
.900		-.2312	-.2360	-.1960	-.2332	

ALPHA( 6) = 4.253 BETA( 2) = -4.076

SECTION ( 1) LEFT VERTICAL		DEPENDENT VARIABLE CP				
Z/BV	.1580	.3170	.6020	.8390	.9250	
X/CV						
.000	.3532	.1955	.2012	.2334	.1654	
.025	.1963	.0898	.1435	.1635	.1163	
.050	.1822	.0758	.1174	.1297	.0870	
.150	.0458	-.0022	.0354	.0191	-.0501	
.300	-.0831	-.0841	.0000	-.0819	-.1707	
.520	-.2325	-.2237	-.2738	-.3070	-.3725	
.685	-.3111	-.5250	-.6901	-.8259	-.5326	
.775	-.2420	-.3004	-.3600	-.5849	-.4628	
.900		-.2313	-.2229	-.1346	-.2327	

ALPHA( 6) = 4.252 BETA( 3) = .002

SECTION ( 1) LEFT VERTICAL		DEPENDENT VARIABLE CP				
Z/BV	.1580	.3170	.6020	.8390	.9250	
X/CV						
.000	.4331	.2842	.3467	.3243	.3279	
.025	-.1460	-.3987	-.3988	-.3787	-.4697	
.050	.0085	-.1733	-.2830	-.3443	-.4020	
.150	-.1029	-.2334	-.1570	-.1850	-.2010	
.300	-.2714	-.2630	.0000	-.2001	-.2519	
.520	-.3646	-.2860	-.3473	-.3583	-.3940	
.685	-.2866	-.4030	-.6417	-.6159	-.4195	
.775	-.2487	-.3152	-.4208	-.4362	-.2785	
.900		-.2467	-.2315	-.2341	-.1456	

ARC11-019 IAB1 LVAP(ELHL SEALED) LEFT VERTICAL

(RETV15)

ALPHA0( 6) = 4.253 BETA0 ( 4) = 4.095

SECTION ( 1)LEFT VERTICAL		DEPENDENT VARIABLE CP				
Z/BV	.1580	.3170	.6020	.8390	.9250	
X/CV						
.000	.3400	.1953	.1120	.0020	.0965	
.025	-.3857	-.7612	-.9576	-.7741	-.7346	
.050	-.3122	-.7624	-.9820	-.7753	-.7120	
.150	-.2380	-.5104	-.7027	-.7768	-.6905	
.300	-.3879	-.4600	.0000	-.7277	-.6633	
.520	-.4648	-.5658	-.3805	-.5733	-.5308	
.685	-.3088	-.3181	-.4596	-.3707	-.3722	
.775	-.2285	-.2834	-.2931	-.2899	-.2878	
.900		-.2765	-.1775	-.1846	-.1836	

ALPHA0( 6) = 4.245 BETA0 ( 5) = 6.148

SECTION ( 1)LEFT VERTICAL		DEPENDENT VARIABLE CP				
Z/BV	.1580	.3170	.6020	.8390	.9250	
X/CV						
.000	.2627	.0717	-.0326	-.1691	-.0650	
.025	-.5621	-.8697	-1.0448	-.8858	-.6521	
.050	-.5120	-.9392	-1.0490	-.8953	-.6632	
.150	-.4588	-.7133	-.9032	-.8077	-.6441	
.300	-.4273	-.6108	.0000	-.7171	-.5636	
.520	-.4341	-.3792	-.6981	-.6506	-.4579	
.685	-.2632	-.3014	-.4046	-.5319	-.3938	
.775	-.2416	-.3090	-.2752	-.4526	-.3621	
.900		-.2729	-.1755	-.3534	-.3301	

ALPHA0( 7) = 5.304 BETA0 ( 1) = -4.072

SECTION ( 1)LEFT VERTICAL		DEPENDENT VARIABLE CP				
Z/BV	.1580	.3170	.6020	.8390	.9250	
X/CV						
.000	.3151	.1671	.1729	.2131	.1397	
.025	.1735	.0835	.1451	.1554	.1031	
.050	.1652	.0653	.1063	.1258	.0725	
.150	.0342	-.0087	.0279	.0126	-.0631	
.300	-.0995	-.0874	.0000	-.0910	-.1887	
.520	-.2328	-.2191	-.2752	-.3197	-.3900	
.685	-.3179	-.5045	-.6754	-.8262	-.5214	
.775	-.2465	-.2983	-.3538	-.5344	-.4395	
.900		-.2370	-.2182	-.1227	-.2040	

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## IAB1A - PRESSURE SOURCE DATA TABULATION

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ARC11-019 IAB1 LVAP(ELHL SEALED) LEFT VERTICAL

(RETV15)

ALPHA0( 7) = 5.305 BETA0 ( 2) = -2.036

SECTION ( 1)LEFT VERTICAL		DEPENDENT VARIABLE CP				
Z/BV	.1580	.3170	.6020	.8390	.9250	
X/CV						
.000	.3617	.2538	.2943	.3121	.2860	
.025	.0411	-.1163	-.0418	-.0037	-.0812	
.050	.0854	-.0630	-.0139	-.0002	-.0520	
.150	-.0395	-.1129	-.0502	-.0706	-.1217	
.300	-.1860	-.1756	.0000	-.1458	-.2086	
.520	-.2927	-.2692	-.2971	-.3341	-.3789	
.685	-.2829	-.4362	-.7993	-.7559	-.5030	
.775	-.2397	-.2855	-.3999	-.5867	-.3625	
.900		-.2315	-.1999	-.2052	-.1962	

ALPHA0( 7) = 5.302 BETA0 ( 3) = .007

SECTION ( 1)LEFT VERTICAL		DEPENDENT VARIABLE CP				
Z/BV	.1580	.3170	.6020	.8390	.9250	
X/CV						
.000	.4143	.2707	.3310	.3127	.3145	
.025	-.1364	-.3802	-.3960	-.3660	-.4669	
.050	.0056	-.1782	-.2880	-.3470	-.3968	
.150	-.1056	-.2215	-.1622	-.1810	-.2031	
.300	-.2643	-.2542	.0000	-.2015	-.2599	
.520	-.3498	-.2983	-.3466	-.3613	-.3975	
.685	-.2742	-.3782	-.6125	-.6060	-.3613	
.775	-.2343	-.3017	-.4062	-.4364	-.2505	
.900		-.2474	-.2243	-.2214	-.1207	

ALPHA0( 7) = 5.302 BETA0 ( 4) = 2.065

SECTION ( 1)LEFT VERTICAL		DEPENDENT VARIABLE CP				
Z/BV	.1580	.3170	.6020	.8390	.9250	
X/CV						
.000	.3505	.2455	.2360	.1772	.2135	
.025	-.2380	-.6434	-.7798	-.7443	-.6993	
.050	-.0907	-.5452	-.7567	-.7219	-.6780	
.150	-.1641	-.3368	-.3265	-.3554	-.4751	
.300	-.3362	-.3884	.0000	-.3311	-.3138	
.520	-.4238	-.3049	-.3915	-.3989	-.4092	
.685	-.2959	-.3501	-.5691	-.4843	-.2648	
.775	-.2349	-.2863	-.3820	-.3009	-.1807	
.900		-.2708	-.2178	-.1460	-.0734	

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ARC11-019 IA81 LVAP(ELHL SEALED) LEFT VERTICAL

(RETV15)

ALPHA0 ( 7 ) = 5.298 BETA0 ( 5 ) = 4.107

SECTION ( 1 ) LEFT VERTICAL

DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.3236	.1787	.0978	.0034	.0714
.025	-.3801	-.7709	-.9193	-.7410	-.7499
.050	-.3001	-.7865	-.9375	-.7406	-.7778
.150	-.2352	-.5198	-.7199	-.7638	-.7461
.300	-.3885	-.4657	.0000	-.7171	-.6812
.520	-.4659	-.3539	-.3812	-.5861	-.5181
.685	-.2770	-.3109	-.4609	-.3687	-.3614
.775	-.2212	-.2854	-.3136	-.2782	-.2631
.900	-.2743	-.1735	-.1846	-.1704	

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## IABIA - PRESSURE SOURCE DATA TABULATION

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ARC11-019 IAB1 LVAP(ELHL SEALED) LEFT VERTICAL

(RETV16) ( 17 OCT 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 976.0000 IN. XT  
 LREF = 1297.0000 INCHES YMRP = .0000 IN. YT  
 BREF = 1297.0000 INCHES ZMRP = 400.0000 IN. ZT  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

MACH = 1.100 RN/FT = 2.250  
 ELV-18 = 8.000 ELV-08 = 6.000  
 RUDDER = .000 SPDBRK = .000

ALPHA0( 1 ) = -6.246 BETA0 ( 1 ) = -4.078

## SECTION ( 1 ) LEFT VERTICAL

## DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.6855	.5557	.5700	.5872	.5321
.025	.5641	.4201	.3890	.3866	.3368
.050	.5459	.4087	.3748	.3688	.3317
.150	.4161	.3220	.2961	.2769	.2189
.300	.2623	.2234	.0000	.1921	.1145
.520	.0850	.0548	.0427	.0151	-.0362
.685	-.3806	-.6340	-.6381	-.6404	-.7022
.775	-.3100	-.5068	-.5943	-.6522	-.7035
.900		-.3379	-.5846	-.6532	-.6498

ALPHA0( 1 ) = -6.234 BETA0 ( 2 ) = -2.033

## SECTION ( 1 ) LEFT VERTICAL

## DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.7442	.6231	.6327	.6294	.6040
.025	.4408	.2605	.2121	.2343	.1596
.050	.4825	.3103	.2562	.2548	.2061
.150	.3607	.2491	.2131	.2017	.1592
.300	.2040	.1587	.0000	.1385	.0810
.520	.0392	.0138	.0131	-.0024	-.0371
.685	-.3998	-.6550	-.6529	-.6445	-.6962
.775	-.3238	-.5084	-.6160	-.6685	-.6931
.900		-.3655	-.6089	-.6665	-.6378



## ARC11-019 IA81 LVAP(ELHL SEALED) LEFT VERTICAL

(RETV16)

ALPHA( 1) = -6.194 BETA( 3) = .038

## SECTION ( 1) LEFT VERTICAL DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.7566	.6524	.6517	.6183	.6254
.025	.2319	.0198	-.0926	-.1091	-.1794
.050	.3836	.2049	-.0346	-.0734	-.1330
.150	.2966	.1547	.1045	.0870	.0741
.300	.1354	.0833	.0000	.0671	.0386
.520	-.0153	-.0403	-.0397	-.0305	-.0514
.685	-.4139	-.6879	-.6768	-.6592	-.7029
.775	-.3232	-.5073	-.6465	-.6941	-.7093
.900		-.3665	-.6643	-.6921	-.6694

ALPHA( 1) = -6.181 BETA( 4) = 2.103

## SECTION ( 1) LEFT VERTICAL DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.7349	.6205	.6093	.5465	.5669
.025	.1041	-.2051	-.4596	-.4789	-.4644
.050	.2143	-.1726	-.3750	-.4853	-.4482
.150	.2244	.0762	-.0327	-.1187	-.1891
.300	.0781	.0077	.0000	-.0271	-.0228
.520	-.0716	-.0917	-.1076	-.0749	-.0783
.685	-.4170	-.7094	-.6855	-.6588	-.6985
.775	-.3244	-.4842	-.6643	-.7049	-.7161
.900		-.3712	-.6949	-.6985	-.6704

ALPHA( 1) = -6.169 BETA( 5) = 4.159

## SECTION ( 1) LEFT VERTICAL DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.6753	.5504	.5261	.4417	.4926
.025	.0000	-.3075	-.5028	-.7557	-.7103
.050	.0071	-.2920	-.5656	-.7689	-.7005
.150	.0871	-.1018	-.2524	-.4839	-.6697
.300	.0304	-.0927	.0000	-.2041	-.2577
.520	-.1137	-.1535	-.2277	-.1822	-.1514
.685	-.4507	-.7203	-.6713	-.6842	-.6771
.775	-.3335	-.4944	-.6750	-.7096	-.7215
.900		-.3992	-.7226	-.6907	-.6768

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ARC11-019 IAB1 LVAP(ELHL SEALED) LEFT VERTICAL

(RETV16)

ALPHA( 2) = -4.136 BETA( 1) = -6.157

SECTION ( 1) LEFT VERTICAL

DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.5738	.4231	.4429	.4715	.3916
.025	.6273	.5005	.4721	.4493	.4196
.050	.5899	.4635	.4308	.4156	.3798
.150	.4426	.3602	.3312	.3097	.2421
.300	.2902	.2532	.0000	.2132	.1263
.520	.1025	.0737	.0444	.0142	-.0446
.685	-.3843	-.6194	-.6247	-.6368	-.6952
.775	-.2952	-.4334	-.5743	-.6327	-.6867
.900		-.3309	-.5582	-.6280	-.6290

ALPHA( 2) = -4.125 BETA( 2) = -4.102

SECTION ( 1) LEFT VERTICAL

DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.6617	.5230	.5303	.5398	.4864
.025	.5247	.3799	.3539	.3539	.3142
.050	.5123	.3691	.3405	.3354	.3011
.150	.3902	.2843	.2627	.2465	.1918
.300	.2266	.1880	.0000	.1664	.0884
.520	.0527	.0272	.0162	-.0083	-.0608
.685	-.3829	-.6452	-.6499	-.6532	-.7141
.775	-.3141	-.4712	-.6078	-.6623	-.7171
.900		-.3467	-.5977	-.6647	-.6667

ALPHA( 2) = -4.108 BETA( 3) = .014

SECTION ( 1) LEFT VERTICAL

DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.7348	.6164	.6117	.5764	.5861
.025	.1920	-.0059	-.1173	-.1291	-.2001
.050	.3542	.1866	-.0561	-.1035	-.1511
.150	.2731	.1218	.0791	.0609	.0475
.300	.1112	.0508	.0000	.0474	.0161
.520	-.0463	-.0628	-.0615	-.0508	-.0714
.685	-.4020	-.6933	-.6819	-.6647	-.7090
.775	-.3176	-.4643	-.6499	-.6995	-.7164
.900		-.3587	-.6701	-.6978	-.6786

ARC11-019 1A81 LVAP(ELHL SEALED) LEFT VERTICAL

(RETV16)

ALPHA0( 2) = -4.082 BETA0 ( 4) = 4.132

SECTION ( 1)LEFT VERTICAL		DEPENDENT VARIABLE CP				
Z/BV	.1580	.3170	.6020	.8390	.9250	
X/CV						
.000	.6464	.5241	.4865	.3997	.4474	
.025	-.0350	-.3262	-.5228	-.7543	-.7076	
.050	-.0296	-.3194	-.5827	-.7647	-.7015	
.150	.0720	-.1265	-.2804	-.4768	-.6702	
.300	.0026	-.1110	.0000	-.2163	-.2927	
.520	-.1481	-.1793	-.2322	-.2065	-.1732	
.685	-.4562	-.7260	-.6853	-.6937	-.6874	
.775	-.3265	-.4839	-.6880	-.7184	-.7390	
.900		-.4041	-.7188	-.7120	-.6949	

ALPHA0( 2) = -4.074 BETA0 ( 5) = 6.189

SECTION ( 1)LEFT VERTICAL		DEPENDENT VARIABLE CP				
Z/BV	.1580	.3170	.6020	.8390	.9250	
X/CV						
.000	.5542	.4133	.3897	.2969	.3579	
.025	-.1130	-.4063	-.6131	-.7507	-.9476	
.050	-.0968	-.4627	-.6313	-.7797	-.9117	
.150	-.2076	-.2731	-.5004	-.6208	-.8083	
.300	-.0164	-.2366	.0000	-.4690	-.5199	
.520	-.1908	-.2522	-.4373	-.4674	-.3782	
.685	-.4786	-.6677	-.7210	-.7999	-.8188	
.775	-.3310	-.4741	-.7001	-.7751	-.8307	
.900		-.4117	-.6110	-.6409	-.7426	

ALPHA0( 3) = -2.033 BETA0 ( 1) = -6.165

SECTION ( 1)LEFT VERTICAL		DEPENDENT VARIABLE CP				
Z/BV	.1580	.3170	.6020	.8390	.9250	
X/CV						
.000	.5525	.3938	.4066	.4234	.3476	
.025	.5919	.4632	.4318	.4110	.3871	
.050	.5565	.4245	.3945	.3841	.3503	
.150	.4093	.3235	.2977	.2751	.2151	
.300	.2544	.2196	.0000	.1857	.1003	
.520	.0725	.0461	.0226	-.0096	-.0677	
.685	-.3897	-.6288	-.6348	-.6506	-.7057	
.775	-.3038	-.4381	-.5851	-.6442	-.6979	
.900		-.3342	-.5686	-.6404	-.6458	

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ARC11-019 IAB1 LVAP(ELHL SEALED) LEFT VERTICAL

(RETV16)

ALPHA0( 3) = -2.021 BETA0 ( 2) = -2.073

SECTION ( 1) LEFT VERTICAL

DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .6020 .8390 .9250

X/CV

.000	.6893	.5618	.5460	.5295	.5159
.025	.3361	.1810	.1261	.1544	.1029
.050	.3992	.2413	.1723	.1794	.1435
.150	.2973	.1726	.1348	.1304	.0934
.300	.1428	.0822	.0000	.0788	.0217
.520	-.0329	-.0477	-.0460	-.0571	-.0913
.685	-.4172	-.6862	-.6832	-.6745	-.7272
.775	-.3305	-.4771	-.6477	-.6907	-.7269
.900		-.3624	-.6457	-.6958	-.6667

ALPHA0( 3) = -2.004 BETA0 ( 3) = 2.061

SECTION ( 1) LEFT VERTICAL

DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .6020 .8390 .9250

X/CV

.000	.6841	.5603	.5275	.4521	.4804
.025	.0189	-.2498	-.4620	-.5344	-.4961
.050	.1623	-.2322	-.3944	-.5215	-.4862
.150	.1799	.0160	-.0955	-.1283	-.1770
.300	.0233	-.0557	.0000	-.0763	-.0821
.520	-.1385	-.1510	-.1540	-.1275	-.1319
.685	-.4119	-.7075	-.7129	-.6846	-.7202
.775	-.3016	-.4600	-.6899	-.7209	-.7395
.900		-.3832	-.7217	-.7212	-.7049

ALPHA0( 3) = -1.987 BETA0 ( 4) = 6.166

SECTION ( 1) LEFT VERTICAL

DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .6020 .8390 .9250

X/CV

.000	.5311	.3895	.3507	.2503	.3134
.025	-.1490	-.4170	-.6374	-.7598	-.9538
.050	-.1287	-.4796	-.6557	-.7713	-.9317
.150	-.2490	-.2988	-.5196	-.6367	-.8103
.300	-.0308	-.2720	.0000	-.4830	-.5108
.520	-.2208	-.2836	-.4363	-.4931	-.4020
.685	-.4949	-.6469	-.7334	-.8039	-.8339
.775	-.3245	-.4756	-.7121	-.7777	-.8264
.900		-.4170	-.5710	-.5781	-.7048

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OF POOR QUALITY

ARC11-019 IAB1 LVAP(ELHL SEALED) LEFT VERTICAL

(RETV16)

ALPHA( 4) = .070 BETA( 1) = -6.166

SECTION ( 1) LEFT VERTICAL

DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .6020 .8390 .9250

X/CV

.000	.5342	.3674	.3683	.3757	.3092
.025	.5532	.4221	.3872	.3700	.3519
.050	.5204	.3863	.3470	.3403	.3146
.150	.3768	.2822	.2562	.2376	.1850
.300	.2163	.1820	.0000	.1570	.0709
.520	.0430	.0149	-.0074	-.0394	-.0922
.685	-.4063	-.6450	-.6544	-.6646	-.7184
.775	-.3191	-.4566	-.6035	-.6551	-.7113
.900		-.3432	-.5917	-.6551	-.6656

ALPHA( 4) = .076 BETA( 2) = -4.111

SECTION ( 1) LEFT VERTICAL

DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .6020 .8390 .9250

X/CV

.000	.6120	.4625	.4555	.4471	.3967
.025	.4494	.2967	.2672	.2685	.2488
.050	.4450	.2957	.2568	.2594	.2322
.150	.3180	.2093	.1854	.1758	.1310
.300	.1566	.1116	.0000	.1088	.0332
.520	-.0153	-.0291	-.0361	-.0595	-.1089
.685	-.4098	-.6670	-.6731	-.6812	-.7364
.775	-.3233	-.4700	-.6323	-.6836	-.7398
.900		-.3467	-.6360	-.6883	-.6900

ALPHA( 4) = .084 BETA( 3) = -.007

SECTION ( 1) LEFT VERTICAL

DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .6020 .8390 .9250

X/CV

.000	.6890	.5576	.5323	.4779	.4899
.025	.1042	-.0532	-.1649	-.1788	-.2442
.050	.2920	.1495	-.1021	-.1639	-.1977
.150	.2238	.0736	.0131	-.0025	-.0156
.300	.0670	-.0045	.0000	-.0143	-.0441
.520	-.0958	-.1136	-.1173	-.1096	-.1275
.685	-.4242	-.7159	-.7142	-.6947	-.7409
.775	-.3161	-.4588	-.6791	-.7246	-.7514
.900		-.3666	-.7048	-.7270	-.7188

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ARC11-019 1A81 LVAP(ELHL SEALED) LEFT VERTICAL

(RETV16)

ALPHA0( 4) = .099 BETA0( 4) = 4.099

SECTION ( 1) LEFT VERTICAL DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.5946	.4591	.4082	.3118	.3553
.025	-.1052	-.3472	-.5561	-.7577	-.7151
.050	-.0883	-.3671	-.6050	-.7675	-.7057
.150	.0116	-.1866	-.3397	-.5363	-.6745
.300	-.0370	-.1539	.0000	-.2381	-.3587
.520	-.1953	-.2247	-.2503	-.2595	-.2050
.685	-.4704	-.7035	-.7122	-.7182	-.7128
.775	-.3260	-.4850	-.6998	-.7256	-.7584
.900		-.4112	-.5983	-.7290	-.7260

ALPHA0( 4) = .104 BETA0( 5) = 6.156

SECTION ( 1) LEFT VERTICAL DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.5004	.3541	.3076	.2053	.2674
.025	-.1940	-.4317	-.6483	-.7524	-.9269
.050	-.1676	-.4895	-.6710	-.7605	-.9191
.150	-.2767	-.3218	-.5484	-.6443	-.7862
.300	-.0461	-.3039	.0000	-.4950	-.5293
.520	-.2456	-.3083	-.4474	-.5168	-.4324
.685	-.5057	-.6497	-.7388	-.7893	-.8272
.775	-.3162	-.4859	-.7182	-.7744	-.8279
.900		-.4275	-.5454	-.5524	-.6398

ALPHA0( 5) = 2.179 BETA0( 1) = -6.160

SECTION ( 1) LEFT VERTICAL DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.5083	.3351	.3315	.3227	.2560
.025	.5262	.3908	.3507	.3298	.3166
.050	.4921	.3540	.3116	.3011	.2790
.150	.3479	.2525	.2208	.2019	.1491
.300	.1856	.1489	.0000	.1239	.0402
.520	.0171	-.0081	-.0287	-.0651	-.1212
.685	-.4301	-.6558	-.6656	-.6748	-.7286
.775	-.3214	-.4668	-.6166	-.6667	-.7205
.900		-.3378	-.6072	-.6663	-.6873

ARC11-019 IAB1 LVAP(ELHL SEALED) LEFT VERTICAL

(RETV16)

ALPHA0( 5) = 2.183 BETA0 ( 2) = -2.076

SECTION ( 1) LEFT VERTICAL

DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.6565	.4974	.4724	.4418	.4305
.025	.2646	.1142	.0579	.0860	.0452
.050	.3385	.1729	.1074	.1093	.0828
.150	.2400	.1071	.0710	.0695	.0364
.300	.0848	.0178	.0000	.0260	-.0275
.520	-.1007	-.1037	-.0926	-.1026	-.1303
.685	-.3892	-.6964	-.7018	-.6975	-.7476
.775	-.3092	-.4357	-.6623	-.7094	-.7534
.900		-.3489	-.6762	-.7148	-.7060

ALPHA0( 5) = 2.194 BETA0 ( 3) = 2.052

SECTION ( 1) LEFT VERTICAL

DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.6475	.4958	.4558	.3690	.3894
.025	-.0830	-.2868	-.4780	-.5408	-.4763
.050	.1362	-.2760	-.4303	-.5327	-.4610
.150	.1315	-.0359	-.1203	-.1477	-.2589
.300	-.0249	-.1041	.0000	-.1264	-.1322
.520	-.1905	-.1987	-.1953	-.1753	-.1753
.685	-.3763	-.6458	-.7306	-.7142	-.7451
.775	-.2854	-.4462	-.7042	-.7380	-.7668
.900		-.4023	-.6431	-.7471	-.7383

ALPHA0( 5) = 2.199 BETA0 ( 4) = 6.158

SECTION ( 1) LEFT VERTICAL

DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.4733	.3244	.2727	.1587	.2193
.025	-.2578	-.4476	-.6579	-.7544	-.9012
.050	-.2315	-.5027	-.6812	-.7574	-.9015
.150	-.3081	-.3444	-.5593	-.6515	-.7646
.300	-.0636	-.3319	.0000	-.5182	-.5534
.520	-.2619	-.3238	-.4575	-.5399	-.4548
.685	-.5027	-.6224	-.7480	-.7825	-.8256
.775	-.3328	-.4841	-.7264	-.7646	-.8337
.900		-.4230	-.5381	-.5236	-.6202

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## IA81A - PRESSURE SOURCE DATA TABULATION

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ARC11-019 IA81 LVAP(ELHL SEALED) LEFT VERTICAL

(RETV16)

ALPHA0( 6) = 4.246 BETA0( 1) = -6.141

SECTION ( 1) LEFT VERTICAL DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.4911	.3072	.2982	.2817	.2146
.025	.4766	.3595	.3144	.2949	.2847
.050	.4516	.3231	.2743	.2672	.2478
.150	.3167	.2196	.1882	.1710	.1205
.300	.1624	.1166	.0000	.0991	.0138
.520	-.0100	-.0299	-.0522	-.0868	-.1400
.685	-.4660	-.6652	-.6760	-.6942	-.7361
.775	-.3269	-.4843	-.6254	-.6788	-.7296
.900		-.3384	-.6217	-.6751	-.7032

ALPHA0( 6) = 4.252 BETA0( 2) = -4.091

SECTION ( 1) LEFT VERTICAL DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.5612	.3967	.3739	.3539	.3072
.025	.3630	.2340	.1851	.2027	.1892
.050	.3613	.2262	.1753	.1882	.1743
.150	.2499	.1358	.1082	.1112	.0710
.300	.0959	.0423	.0000	.0521	-.0191
.520	-.0709	-.0860	-.0809	-.1069	-.1567
.685	-.4490	-.6839	-.6967	-.7006	-.7534
.775	-.3407	-.4766	-.6521	-.7022	-.7565
.900		-.3483	-.6575	-.7033	-.7077

ALPHA0( 6) = 4.259 BETA0( 3) = -.003

SECTION ( 1) LEFT VERTICAL DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.6420	.4838	.4481	.3886	.4005
.025	.0542	-.1106	-.2365	-.2260	-.2944
.050	.2440	.0927	-.1993	-.2172	-.2389
.150	.1640	.0075	-.0513	-.0588	-.0690
.300	.0002	-.0723	.0000	-.0683	-.0931
.520	-.1552	-.1706	-.1682	-.1487	-.1677
.685	-.4345	-.6947	-.7321	-.7134	-.7561
.775	-.3139	-.4558	-.6943	-.7365	-.7687
.900		-.3831	-.6869	-.7433	-.7385



ARC11-019 IAB1 LVAP(ELHL SEALED) LEFT VERTICAL

(RETV16)

ALPHA( 6) = 4.261 BETA( 4) = 4.109

SECTION ( 1) LEFT VERTICAL

DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .6020 .8390 .9250

X/CV

.000	.5546	.4028	.3342	.2341	.2781
.025	-.1835	-.3774	-.5815	-.7442	-.7131
.050	-.1349	-.4183	-.6216	-.7442	-.7056
.150	.0088	-.2235	-.3904	-.5464	-.6647
.300	-.0870	-.1895	.0000	-.2913	-.4003
.520	-.2688	-.2781	-.2788	-.2977	-.2260
.685	-.3559	-.5794	-.7463	-.7263	-.7324
.775	-.3066	-.4628	-.7129	-.7409	-.7771
.900	-.3995	-.4868	-.7503	-.7503	-.7510

ALPHA( 6) = 4.259 BETA( 5) = 6.170

SECTION ( 1) LEFT VERTICAL

DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .6020 .8390 .9250

X/CV

.000	.4603	.2985	.2449	.1261	.1815
.025	-.3602	-.4916	-.6579	-.7581	-.8915
.050	-.3052	-.5314	-.6809	-.7615	-.8963
.150	-.1549	-.4051	-.5573	-.6458	-.7805
.300	-.1354	-.3376	.0000	-.5327	-.5580
.520	-.3201	-.3272	-.4692	-.5465	-.4646
.685	-.3508	-.5843	-.7571	-.7788	-.8160
.775	-.3103	-.4838	-.7234	-.7646	-.8336
.900	-.3812	-.5327	-.5448	-.5448	-.6173

ALPHA( 7) = 6.364 BETA( 1) = -4.074

SECTION ( 1) LEFT VERTICAL

DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .6020 .8390 .9250

X/CV

.000	.5743	.3826	.3336	.3040	.2547
.025	.3465	.2107	.1616	.1660	.1619
.050	.3543	.2057	.1491	.1552	.1433
.150	.2373	.1162	.0798	.0801	.0386
.300	.0746	.0216	.0000	.0273	-.0424
.520	-.0895	-.1033	-.1016	-.1248	-.1711
.685	-.4724	-.6885	-.7007	-.6985	-.7505
.775	-.3645	-.5115	-.6556	-.7019	-.7542
.900	-.3530	-.6636	-.6975	-.6975	-.7120

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## IA81A - PRESSURE SOURCE DATA TABULATION

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ARC11-019 IA81 LVAP(ELHL SEALED) LEFT VERTICAL

(RETV16)

ALPHA0( 7) = 6.367 BETA0 ( 2) = -2.043

SECTION ( 1) LEFT VERTICAL DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.6353	.4357	.3896	.3454	.3312
.025	.2752	.0655	-.0136	.1221	-.0116
.050	.3204	.1248	.0349	.0410	.0256
.150	.2017	.0481	.0046	.1022	-.0228
.300	.0169	-.0433	.0000	-.0315	-.0807
.520	-.1372	-.1431	-.1347	-.1524	-.1778
.685	-.4427	-.7115	-.7233	-.7178	-.7642
.775	-.3324	-.4550	-.6832	-.7283	-.7747
.900		-.3623	-.6984	-.7263	-.7391

ALPHA0( 7) = 6.367 BETA0 ( 3) = .008

SECTION ( 1) LEFT VERTICAL DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.6446	.4569	.4059	.3347	.3472
.025	.0537	-.1255	-.2533	-.2505	-.3186
.050	.2418	.0605	-.2279	-.2384	-.2688
.150	.1496	-.0170	-.0804	-.0882	-.0991
.300	-.0273	-.1020	.0000	-.0953	-.1177
.520	-.1775	-.1915	-.1928	-.1739	-.1919
.685	-.4558	-.6730	-.7425	-.7205	-.7662
.775	-.3200	-.4611	-.7047	-.7439	-.7794
.900		-.4084	-.6406	-.7520	-.7523

ALPHA0( 7) = 6.364 BETA0 ( 4) = 2.073

SECTION ( 1) LEFT VERTICAL DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.6405	.4401	.3763	.2795	.3060
.025	-.0757	-.2928	-.4917	-.5597	-.4879
.050	.1474	-.2935	-.4660	-.5631	-.4757
.150	.1059	-.0789	-.1693	-.1963	-.2939
.300	-.0771	-.1605	.0000	-.1750	-.1744
.520	-.2361	-.2428	-.2385	-.2160	-.2062
.685	-.4227	-.5921	-.7524	-.7273	-.7663
.775	-.3205	-.4529	-.7213	-.7466	-.7808
.900		-.4293	-.5037	-.7591	-.7561

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## IAB1A - PRESSURE SOURCE DATA TABULATION

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ARC11-019 IAB1 LVAP(ELHL SEALED) LEFT VERTICAL

(RETV16)

ALPHA0 ( 7 ) = 6.359 BETA0 ( 5 ) = 4.124

SECTION ( 1 ) LEFT VERTICAL DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .6020 .8390 .9250

X/CV

.000	.5642	.3859	.2993	.1949	.2346
.025	-.1318	-.3870	-.5908	-.7395	-.7154
.050	-.0724	-.4272	-.6326	-.7422	-.7093
.100	.0484	-.2214	-.4107	-.5136	-.6747
.300	-.1258	-.2144	.0000	-.3124	-.4069
.520	-.2952	-.3051	-.2905	-.3092	-.2411
.685	-.3799	-.5935	-.7624	-.7303	-.7757
.775	-.3279	-.4734	-.7236	-.7503	-.7869
.900		-.4012	-.4749	-.7602	-.7584

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## IABIA - PRESSURE SOURCE DATA TABULATION

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ARC11-019 IAB1 LVAP(ELHL SEALED) LEFT VERTICAL

(RETV17) ( 17 OCT 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 976.0000 IN. XT  
 LREF = 1297.0000 INCHES YMRP = .0000 IN. YT  
 BREF = 1297.0000 INCHES ZMRP = 400.0000 IN. ZT  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

MACH = .900 RN/FT = 2.250  
 ELV-18 = 10.000 ELV-08 = 4.000  
 RUDDER = .000 SPDBRK = .000

ALPHA( 1 ) = -6.178 BETA( 1 ) = -4.055

## SECTION ( 1 ) LEFT VERTICAL

## DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.4896	.3635	.4071	.4394	.3687
.025	.3685	.2274	.2300	.2134	.1573
.050	.3464	.2175	.1999	.2012	.1443
.150	.2018	.1242	.1070	.0825	.0150
.300	.0459	.0130	.0000	-.0259	-.1150
.520	-.1654	-.1809	-.1956	-.2496	-.2787
.685	-.3416	-.6741	-1.0428	-.8354	-.5691
.775	-.2665	-.3169	-.8511	-.6695	-.4767
.900	-.2780	-.2876	-.5066	-.3342	

ALPHA( 1 ) = -6.167 BETA( 2 ) = -2.018

## SECTION ( 1 ) LEFT VERTICAL

## DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.5495	.4389	.4885	.4990	.4600
.025	.2308	.0415	.0136	.0358	-.0652
.050	.2611	.0975	.0619	.0549	-.0079
.150	.1266	.0347	.0113	-.0109	-.0579
.300	-.0240	-.0614	.0000	-.0901	-.1464
.520	-.2179	-.2322	-.2324	-.2715	-.2838
.685	-.3581	-.6669	-1.0812	-.7352	-.5034
.775	-.2704	-.3600	-.8423	-.6425	-.4458
.900	-.2897	-.2592	-.5034	-.3308	

ARC11-019 IAB1 LVAP(ELHL SEALED) LEFT VERTICAL

(RETV17)

ALPHAO( 1) = -6.142 BETA0 ( 3) = .046

SECTION ( 1) LEFT VERTICAL

DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .6020 .8390 .9250

X/CV

.000	.5775	.4719	.5156	.4935	.4982
.025	.0103	-.2269	-.3533	-.3464	-.4442
.050	.1563	-.0153	-.2603	-.3049	-.3810
.150	.0549	-.0607	-.1049	-.1205	-.1395
.300	-.1026	-.1396	.0000	-.1461	-.1984
.520	-.2726	-.2790	-.2946	-.3068	-.3003
.685	-.3591	-.6473	-1.0713	-.6283	-.6639
.775	-.2699	-.3860	-.5647	-.5138	-.2842
.900		-.2942	-.3902	-.4071	-.2153

ALPHAO( 1) = -6.130 BETA0 ( 4) = 2.104

SECTION ( 1) LEFT VERTICAL

DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .6020 .8390 .9250

X/CV

.000	.5435	.4383	.4523	.3987	.4263
.025	-.1237	-.4908	-.8458	-.8282	-.7278
.050	-.0017	-.4439	-.6253	-.7376	-.7080
.150	-.0265	-.1660	-.2632	-.3256	-.4050
.300	-.1790	-.2274	.0000	-.2837	-.2610
.520	-.3288	-.3675	-.3671	-.3504	-.3282
.685	-.3875	-.5286	-1.0224	-.6369	-.6449
.775	-.2689	-.4391	-.5255	-.4260	-.2984
.900		-.2951	-.3766	-.3313	-.2274

ALPHAO( 1) = -6.123 BETA0 ( 5) = 4.151

SECTION ( 1) LEFT VERTICAL

DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .6020 .8390 .9250

X/CV

.000	.4831	.3559	.3499	.2523	.3142
.025	-.2355	-.6207	-.8732	-.9661	-1.1333
.050	-.2469	-.5785	-.9256	-.9851	-1.1146
.150	-.1552	-.3681	-.5014	-.7619	-.9773
.300	-.2328	-.3397	.0000	-.5338	-.5066
.520	-.3831	-.4171	-.5061	-.5290	-.4073
.685	-.4431	-.5162	-.8565	-.3829	-.3326
.775	-.2671	-.4331	-.4662	-.2943	-.2481
.900		-.3233	-.3244	-.2391	-.1943

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ARC11-019 1A1 LVAP(ELHL SEALED) LEFT VERTICAL

(RETV17)

ALPHA( 2) = -4.089 BETA( 1) = -6.119

SECTION ( 1) LEFT VERTICAL DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.3495	.2024	.2463	.2941	.1951
.025	.4457	.3336	.3433	.3024	.2660
.050	.4005	.2883	.2835	.2702	.2214
.150	.2408	.1815	.1626	.1341	.0610
.300	.0907	.0606	.0000	.0091	-.0872
.520	-.1248	-.1513	-.1869	-.2346	-.3127
.685	-.3289	-.6424	-.9850	-.9837	-.8976
.775	-.2479	-.2926	-.4025	-.8157	-.6640
.900		-.2475	-.2305	-.4034	-.4126

ALPHA( 2) = -4.079 BETA( 2) = -4.073

SECTION ( 1) LEFT VERTICAL DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.4592	.3200	.3583	.3902	.3183
.025	.3325	.1941	.2013	.1956	.1414
.050	.3101	.1819	.1759	.1751	.1227
.150	.1636	.0930	.0824	.0634	-.0096
.300	.0115	-.0142	.0000	-.0442	-.1347
.520	-.1909	-.1992	-.2209	-.2681	-.3334
.685	-.3286	-.6739	-1.0262	-.8306	-.5446
.775	-.2609	-.3178	-.5690	-.6586	-.4691
.900		-.2749	-.2619	-.4405	-.3196

ALPHA( 2) = -4.065 BETA( 3) = .030

SECTION ( 1) LEFT VERTICAL DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.5498	.4249	.4752	.4567	.4610
.025	-.0305	-.2645	-.3713	-.3587	-.4469
.050	.1221	-.0526	-.2813	-.3158	-.3954
.150	.0189	-.0983	-.1290	-.1424	-.1523
.300	-.1424	-.1685	.0000	-.1569	-.2094
.520	-.3007	-.2900	-.3101	-.3165	-.3379
.685	-.3532	-.5999	-1.0157	-.6184	-.5881
.775	-.2733	-.3873	-.5199	-.5041	-.2859
.900		-.2832	-.3625	-.4015	-.2092

ARC11-019 1A81 LVAP(ELHL SEALED) LEFT VERTICAL

(RETV17)

ALPHA0( 2) = -4.044 BETA0 ( 4) = 4.123

SECTION ( 1) LEFT VERTICAL

DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .6020 .8390 .9250

X/CV

.000	.4456	.3189	.3005	.1944	.2516
.025	-.2830	-.6622	-.9093	-.9688	-1.1658
.050	-.2868	-.6282	-.9614	-.9875	-1.1305
.150	-.1669	-.4088	-.5480	-.7767	-.9536
.300	-.2746	-.3762	.0000	-.5861	-.5668
.520	-.4269	-.4328	-.5376	-.5476	-.4318
.685	-.3926	-.4868	-.6575	-.3612	-.2608
.775	-.2593	-.3953	-.4338	-.2871	-.1992
.900		-.3172	-.2936	-.2204	-.1456

ALPHA0( 2) = -4.041 BETA0 ( 5) = 6.175

SECTION ( 1) LEFT VERTICAL

DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .6020 .8390 .9250

X/CV

.000	.3345	.1861	.1763	.0493	.1327
.025	-.3862	-.7602	-.9975	-1.1184	-1.2467
.050	-.3445	-.8268	-1.0192	-1.1324	-1.2555
.150	-.4834	-.5738	-.8482	-1.0340	-1.2051
.300	-.2855	-.5256	.0000	-.7213	-.8414
.520	-.4663	-.5206	-.7688	-.4860	-.4207
.685	-.4572	-.5058	-.6460	-.3681	-.3047
.775	-.2486	-.4070	-.4868	-.2856	-.2509
.900		-.3504	-.3215	-.2318	-.1860

ALPHA0( 3) = -2.003 BETA0 ( 1) = -6.127

SECTION ( 1) LEFT VERTICAL

DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .6020 .8390 .9250

X/CV

.000	.3299	.1664	.1931	.2334	.1362
.025	.4100	.3027	.3130	.2809	.2472
.050	.3697	.2499	.2527	.2472	.1994
.150	.2104	.1513	.1420	.1101	.0367
.300	.0622	.0329	.0000	-.0151	-.1122
.520	-.1438	-.1696	-.2069	-.2568	-.3344
.685	-.3372	-.6230	-.9456	-.9603	-.8333
.775	-.2514	-.2926	-.3785	-.6155	-.5823
.900		-.2507	-.2135	-.3116	-.3644

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ARC11-019 IAB1 LVAP(ELHL SEALED) LEFT VERTICAL

(RETV17)

ALPHA0( 3) = -1.993 BETA0 ( 2) = -2.044

SECTION ( 1) LEFT VERTICAL		DEPENDENT VARIABLE CP			
Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.4907	.3613	.4053	.4240	.3856
.025	.1534	-.0365	-.0242	.0207	-.0640
.050	.1907	.0236	.0127	.0371	-.0250
.150	.0545	-.0349	-.0284	-.0364	-.0808
.300	-.0959	-.1198	.0000	-.1156	-.1733
.520	-.2676	-.2576	-.2626	-.3005	-.3394
.685	-.3239	-.5447	-1.0275	-.7264	-.4384
.775	-.2554	-.3353	-.4438	-.6225	-.4090
.900		-.2759	-.2660	-.4155	-.3070

ALPHA0( 3) = -1.979 BETA0 ( 3) = 2.069

SECTION ( 1) LEFT VERTICAL		DEPENDENT VARIABLE CP			
Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.4828	.3575	.3781	.3113	.3469
.025	-.1872	-.5508	-.8412	-.8497	-.6883
.050	-.0530	-.4776	-.6816	-.7823	-.6688
.150	-.0846	-.2390	-.3065	-.3493	-.4793
.300	-.2552	-.2890	.0000	-.2959	-.2838
.520	-.3887	-.3813	-.3912	-.3649	-.3722
.685	-.3425	-.4561	-.6500	-.5501	-.4100
.775	-.2655	-.3840	-.4495	-.4192	-.2785
.900		-.2791	-.3104	-.2903	-.1707

ALPHA0( 3) = -1.967 BETA0 ( 4) = 6.153

SECTION ( 1) LEFT VERTICAL		DEPENDENT VARIABLE CP			
Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.2997	.1475	.1220	-.0123	.0686
.025	-.3992	-.7924	-1.0263	-1.1185	-1.1977
.050	-.3831	-.8601	-1.0431	-1.1273	-1.2269
.150	-.5105	-.6173	-.8801	-1.0164	-1.1305
.300	-.3230	-.5545	.0000	-.7267	-.8354
.520	-.4986	-.5269	-.7910	-.4912	-.5845
.685	-.4175	-.4852	-.6115	-.3575	-.3871
.775	-.2469	-.3873	-.4565	-.2876	-.2872
.900		-.3326	-.2847	-.2299	-.2073

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ARC11-019 1A81 LVAP(ELHL SEALED) LEFT VERTICAL

(RETV17)

ALPHA0( 4) = .077 BETA0 ( 1) = -6.130

SECTION ( 1) LEFT VERTICAL DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .6020 .8390 .9250

X/CV

.000	.3221	.1291	.1520	.1802	.0843
.025	.3829	.2813	.2968	.2709	.2384
.050	.3395	.2303	.2386	.2349	.1858
.150	.1839	.1280	.1276	.1031	.0264
.300	.0412	.0189	.0000	-.0161	-.1152
.520	-.1582	-.1711	-.2127	-.2681	-.3356
.685	-.3394	-.5865	-.8915	-.9398	-.8310
.775	-.2496	-.2900	-.3577	-.5935	-.5590
.900	-.2380	-.2211	-.2616	-.3372	

ALPHA0( 4) = .082 BETA0 ( 2) = -4.088

SECTION ( 1) LEFT VERTICAL DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .6020 .8390 .9250

X/CV

.000	.4153	.2422	.2715	.2993	.2218
.025	.2628	.1255	.1668	.1706	.1312
.050	.2437	.1122	.1356	.1493	.1553
.150	.0992	.0381	.0488	.0362	-.0315
.300	-.0400	-.0521	.0000	-.0680	-.1576
.520	-.2146	-.2195	-.2469	-.2917	-.3581
.685	-.3190	-.6116	-.9644	-.8139	-.5136
.775	-.2485	-.3059	-.3965	-.5434	-.4361
.900		-.2477	-.2557	-.3608	-.2856

ALPHA0( 4) = .083 BETA0 ( 3) = .004

SECTION ( 1) LEFT VERTICAL DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .6020 .8390 .9250

X/CV

.000	.4987	.3560	.4078	.3995	.3995
.025	-.0942	-.3342	-.3847	-.3626	-.4522
.050	.0599	-.1206	-.2918	-.3207	-.3929
.150	-.0519	-.1717	-.1512	-.1580	-.1715
.300	-.2224	-.2293	.0000	-.1797	-.2311
.520	-.3453	-.3074	-.3200	-.3371	-.3642
.685	-.3098	-.4274	-.8043	-.5650	-.3994
.775	-.2545	-.3546	-.4663	-.4583	-.2816
.900		-.2540	-.2746	-.3245	-.1696

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ARC11-019 IAB1 LVAP(ELHL SEALED) LEFT VERTICAL

(RETV17)

ALPHA0( 4) = .096 BETA0( 4) = 4.096

SECTION ( 1)LEFT VERTICAL

DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .6020 .8390 .9250

X/CV

.000	.3941	.2504	.2181	.1048	.1683
.025	-.3389	-.7050	-.9391	-.9436	-.8844
.050	-.3077	-.6757	-.9863	-.9546	-.8779
.150	-.2244	-.4417	-.6000	-.8126	-.8451
.300	-.3287	-.4212	.0000	-.6501	-.7270
.520	-.4710	-.4124	-.5157	-.5028	-.5387
.685	-.3443	-.4231	-.5525	-.3753	-.3364
.775	-.2385	-.3386	-.3862	-.2717	-.2587
.900		-.3135	-.2681	-.1679	-.1524

ALPHA0( 4) = .101 BETA0( 5) = 6.143

SECTION ( 1)LEFT VERTICAL

DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .6020 .8390 .9250

X/CV

.000	.2880	.1157	.0792	-.0608	.0279
.025	-.4518	-.8057	-1.0342	-1.0399	-.7778
.050	-.4258	-.8745	-1.0517	-.9598	-.7798
.150	-.5305	-.6390	-.8914	-.9102	-.7564
.300	-.3463	-.5672	.0000	-.7611	-.7084
.520	-.5187	-.5134	-.7847	-.6086	-.5085
.685	-.3849	-.4519	-.5402	-.5004	-.4121
.775	-.2573	-.3774	-.3854	-.4513	-.3634
.900		-.3148	-.2470	-.3554	-.3106

ALPHA0( 5) = 2.172 BETA0( 1) = -6.124

SECTION ( 1)LEFT VERTICAL

DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .6020 .8390 .9250

X/CV

.000	.3100	.1083	.1002	.1306	.0365
.025	.3462	.2467	.2713	.2522	.2194
.050	.3073	.2032	.2206	.2168	.1727
.150	.1620	.1116	.1135	.0849	.0112
.300	.0209	.0026	.0000	-.0314	-.1266
.520	-.1682	-.1842	-.2299	-.2751	-.3489
.685	-.3368	-.5616	-.7342	-.9226	-.7152
.775	-.2445	-.2886	-.3306	-.4909	-.5296
.900		-.2414	-.2116	-.2238	-.2728

ARC11-019 IAB1 LVAP(ELHL SEALED) LEFT VERTICAL

(RETV17)

ALPHA0( 5) = 2.177 BETA0 ( 2) = -2.050

SECTION ( 1) LEFT VERTICAL DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .6020 .8390 .9250

X/CV

.000	.4012	.3058	.3320	.3642	.3267
.025	.0740	-.1114	-.0466	.0051	-.0820
.050	.1215	-.0366	-.0185	.0123	-.0458
.150	-.0066	-.0971	-.0496	-.0561	-.1072
.300	-.1582	-.1574	.0000	-.1297	-.1979
.520	-.2859	-.2657	-.2850	-.3203	-.3645
.685	-.2908	-.4601	-.9647	-.7255	-.4385
.775	-.2475	-.3067	-.3951	-.4979	-.3881
.900		-.2398	-.2129	-.3371	-.2623

ALPHA0( 5) = 2.180 BETA0 ( 3) = 2.054

SECTION ( 1) LEFT VERTICAL DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .6020 .8390 .9250

X/CV

.000	.4039	.3037	.2922	.2384	.2757
.025	-.2219	-.6059	-.8168	-.7345	-.6890
.050	-.0541	-.5375	-.7463	-.7122	-.6676
.150	-.1327	-.2966	-.3493	-.3489	-.4809
.300	-.3150	-.3554	.0000	-.3069	-.2950
.520	-.4373	-.3831	-.3694	-.3887	-.3895
.685	-.3382	-.3944	-.6151	-.4946	-.3228
.775	-.2489	-.3167	-.4195	-.3567	-.2291
.900		-.2780	-.2443	-.2298	-.1258

ALPHA0( 5) = 2.179 BETA0 ( 4) = 6.141

SECTION ( 1) LEFT VERTICAL DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .6020 .8390 .9250

X/CV

.000	.2750	.0910	.0207	-.1183	-.0211
.025	-.5103	-.8216	-1.0516	-.9472	-.7362
.050	-.4764	-.8966	-1.0684	-.9696	-.7385
.150	-.5320	-.6798	-.9140	-.8962	-.7151
.300	-.3721	-.6095	.0000	-.7665	-.6157
.520	-.5065	-.4914	-.7768	-.6314	-.5040
.685	-.3398	-.4276	-.5055	-.5239	-.4097
.775	-.2397	-.3710	-.3446	-.4625	-.3783
.900		-.3060	-.2142	-.3650	-.3271

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## 1A81A - PRESSURE SOURCE DATA TABULATION

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ARC11-019 1A81 LVAP(ELHL SEALED) LEFT VERTICAL

(RETV17)

ALPHA0( 6) = 4.252 BETA0 ( 1) = -6.110

SECTION ( 1) LEFT VERTICAL

DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .6020 .8390 .9250

X/CV

.000	.2923	.0826	.0542	.0764	-.0006
.025	.2938	.2178	.2509	.2378	.2099
.050	.2651	.1777	.1975	.2058	.1601
.150	.1338	.0858	.0984	.0737	.0005
.300	.0032	-.0080	.0000	-.0381	-.1361
.520	-.1721	-.1841	-.2351	-.2907	-.3576
.685	-.3222	-.5292	-.6072	-.9029	-.6794
.775	-.2386	-.2920	-.3229	-.4223	-.4645
.900	-.2383	-.2416	-.1950	-.2301	

ALPHA0( 6) = 4.257 BETA0 ( 2) = -4.071

SECTION ( 1) LEFT VERTICAL

DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .6020 .8390 .9250

X/CV

.000	.3507	.2044	.1834	.2190	.1598
.025	.1949	.0820	.1273	.1534	.1165
.050	.1839	.0812	.1015	.1261	.0800
.150	.0452	-.0070	.0215	.0203	-.0516
.300	-.0878	-.0930	.0000	-.0794	-.1691
.520	-.2349	-.2291	-.2629	-.3094	-.3691
.685	-.3206	-.5423	-.8274	-.8771	-.5550
.775	-.2432	-.3027	-.3679	-.5771	-.4824
.900		-.2363	-.2348	-.1702	-.2542

ALPHA0( 6) = 4.252 BETA0 ( 3) = .005

SECTION ( 1) LEFT VERTICAL

DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .6020 .8390 .9250

X/CV

.000	.4399	.2935	.3398	.3280	.3269
.025	-.1348	-.3873	-.3997	-.3686	-.4598
.050	.0149	-.1678	-.2874	-.3523	-.3958
.150	-.0958	-.2218	-.1614	-.1799	-.1985
.300	-.2622	-.2703	.0000	-.1954	-.2514
.520	-.3641	-.2995	-.3311	-.3562	-.3893
.685	-.2796	-.4024	-.6570	-.5688	-.3623
.775	-.2482	-.3204	-.4368	-.4270	-.2645
.900		-.2472	-.2473	-.2636	-.1443

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ARC11-019 IAB1 LVAP(ELHL SEALED) LEFT VERTICAL

(RETV17)

ALPHA0( 6) = 4.251 BETA0 ( 4) = 4.101

SECTION ( 1) LEFT VERTICAL DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .6020 .8390 .9250

X/CV

.000	.3348	.1937	.1114	-.0041	.0859
.025	-.3836	-.7590	-.9671	-.8321	-.6912
.050	-.3152	-.7578	-.9969	-.8058	-.6881
.150	-.2395	-.5118	-.6857	-.8112	-.6693
.300	-.3882	-.4689	.0000	-.7408	-.6666
.520	-.4787	-.3910	-.4044	-.5815	-.5570
.685	-.3209	-.3386	-.4413	-.3967	-.4030
.775	-.2368	-.3072	-.3029	-.3055	-.3191
.900		-.2801	-.2022	-.1828	-.2017

ALPHA0( 6) = 4.247 BETA0 ( 5) = 6.153

SECTION ( 1) LEFT VERTICAL DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .6020 .8390 .9250

X/CV

.000	.2560	.0628	-.0273	-.1766	-.0626
.025	-.5646	-.8706	-1.0422	-.8840	-.6375
.050	-.5146	-.9431	-1.0575	-.8913	-.6333
.150	-.4600	-.7215	-.9027	-.8177	-.6210
.300	-.4257	-.6122	.0000	-.7373	-.5683
.520	-.4406	-.3928	-.7194	-.6394	-.4696
.685	-.2669	-.3224	-.4242	-.5345	-.4044
.775	-.2433	-.3175	-.2718	-.4650	-.3799
.900		-.2701	-.1712	-.3666	-.3420

ALPHA0( 7) = 6.350 BETA0 ( 1) = -4.053

SECTION ( 1) LEFT VERTICAL DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .6020 .8390 .9250

X/CV

.000	.3009	.1590	.1672	.1992	.1235
.025	.1601	.0696	.1384	.1456	.1059
.050	.1495	.0528	.1049	.1205	.0663
.150	.0174	-.0239	.0274	.0096	-.0634
.300	-.1161	-.0995	.0000	-.0904	-.1813
.520	-.2508	-.2302	-.2678	-.3248	-.3820
.685	-.3261	-.5034	-.6732	-.8383	-.5224
.775	-.2409	-.2936	-.3476	-.5319	-.4381
.900		-.2275	-.2317	-.1317	-.1844

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## 1A81A - PRESSURE SOURCE DATA TABULATION

PAGE 575

ARC11-019 1A81 LVAP(ELHL SEALED) LEFT VERTICAL

(RETV17)

ALPHA( 7) = 6.348 BETA( 2) = -2.025

## SECTION ( 1) LEFT VERTICAL

## DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.3208	.2219	.2881	.2988	.2669
.025	.0302	-.1117	-.0563	-.0165	-.0875
.050	.0697	-.0706	-.0241	-.0062	-.0601
.150	-.0550	-.1105	-.0593	-.0734	-.1255
.300	-.1935	-.1749	.0000	-.1466	-.2100
.520	-.2970	-.2734	-.2919	-.3352	-.3813
.685	-.2959	-.4348	-.7733	-.7360	-.4533
.775	-.2464	-.2912	-.3943	-.5347	-.3740
.900		-.2399	-.2187	-.2355	-.2350

ALPHA( 7) = 6.344 BETA( 3) = .018

## SECTION ( 1) LEFT VERTICAL

## DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.3111	.2475	.3349	.3049	.3055
.025	-.1018	-.3544	-.4172	-.3731	-.4619
.050	-.0184	-.2083	-.2959	-.3599	-.3863
.150	-.1048	-.2100	-.1708	-.1821	-.1977
.300	-.2440	-.2534	.0000	-.1942	-.2538
.520	-.3354	-.3123	-.3283	-.3588	-.3924
.685	-.2798	-.3750	-.6527	-.5821	-.3504
.775	-.2376	-.2845	-.4073	-.4371	-.2524
.900		-.2431	-.2201	-.2507	-.1346

ALPHA( 7) = 6.340 BETA( 4) = 2.076

## SECTION ( 1) LEFT VERTICAL

## DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.3071	.2122	.2374	.1639	.1948
.025	-.2397	-.6024	-.7402	-.7292	-.6935
.050	-.1368	-.5171	-.7227	-.7174	-.6752
.150	-.1688	-.3208	-.3596	-.3733	-.4813
.300	-.3025	-.3417	.0000	-.3253	-.3065
.520	-.3685	-.3310	-.3863	-.3914	-.4117
.685	-.2816	-.3451	-.5764	-.4736	-.2687
.775	-.2370	-.2735	-.3733	-.3119	-.1822
.900		-.2552	-.2027	-.1524	-.0840

ARC11-019 IAB1 LVAP(ELHL SEALED) LEFT VERTICAL

(RETV17)

ALPHA0 ( 7 ) = 6.335 BETA0 ( 5 ) = 4.123

SECTION ( 1 ) LEFT VERTICAL DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.2935	.1422	.0831	-.0173	.0513
.025	-.4015	-.7752	-.9039	-.7631	-.8386
.050	-.3299	-.8013	-.9268	-.7615	-.8333
.150	-.2671	-.5288	-.6717	-.7099	-.7934
.300	-.3946	-.4524	.0000	-.6698	-.6892
.520	-.4383	-.3546	-.4189	-.5485	-.4328
.685	-.2889	-.3206	-.5045	-.3515	-.2756
.775	-.2323	-.2851	-.3217	-.2898	-.2088
.900		-.2710	-.1913	-.1860	-.1071

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## IABIA - PRESSURE SOURCE DATA TABULATION

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ARC11-019 IAB1 LVAP(ELHL SEALED) LEFT VERTICAL

(RETV18) ( 17 OCT 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 976.0000 IN. XT  
 LREF = 1297.0000 INCHES YMRP = .0000 IN. YT  
 BREF = 1297.0000 INCHES ZMRP = 400.0000 IN. ZT  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

MACH = 1.100 RN/FT = 2.250  
 ELV-18 = 10.000 ELV-08 = 4.000  
 RUDDER = .000 SPDBRK = .000

ALPHA( 1) = -6.223 BETA( 1) = .032

## SECTION ( 1) LEFT VERTICAL

## DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.7576	.6486	.6507	.6163	.6281
.025	.2250	.0115	-.1057	-.1195	-.1869
.050	.3765	.2017	-.0401	-.0825	-.1413
.150	.2927	.1515	.0986	.0820	.0741
.300	.1324	.0774	.0000	.0682	.0430
.520	-.0181	-.0414	-.0344	-.0312	-.0518
.685	-.4175	-.6928	-.6851	-.6585	-.7024
.775	-.3293	-.5013	-.6478	-.6947	-.7075
.900		-.3700	-.6653	-.6926	-.6670

ALPHA( 2) = -4.129 BETA( 1) = -4.089

## SECTION ( 1) LEFT VERTICAL

## DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.6639	.5267	.5324	.5415	.4894
.025	.5247	.3780	.3485	.3455	.3099
.050	.5105	.3666	.3330	.3344	.2988
.150	.3800	.2812	.2569	.2441	.1910
.300	.2260	.1848	.0000	.1660	.0909
.520	.0530	.0256	.0225	-.0071	-.0605
.685	-.3853	-.6476	-.6543	-.6523	-.7131
.775	-.3118	-.4799	-.6058	-.6614	-.7141
.900		-.3405	-.6072	-.6645	-.6587

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ARC11-019 IAB1 LVAP(ELHL SEALED) LEFT VERTICAL

(RETV18)

ALPHAO ( 2 ) = -4.111 BETAO ( 2 ) = .021

SECTION ( 1 ) LEFT VERTICAL

DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .6020 .8390 .9250

X/CV

.000	.7333	.6130	.6083	.5695	.5833
.025	.1802	-.0188	-.1399	-.1530	-.2173
.050	.3454	.1765	-.0694	-.1176	-.1669
.150	.2670	.1192	.0682	.0524	.0414
.300	.1049	.0443	.0000	.0389	.0136
.520	-.0533	-.0680	-.0620	-.0568	-.0798
.685	-.4158	-.7025	-.6985	-.6732	-.7210
.775	-.3225	-.4681	-.6590	-.7074	-.7257
.900		-.3618	-.6789	-.7068	-.6871

ALPHAO ( 2 ) = -4.085 BETAO ( 3 ) = 4.129

SECTION ( 1 ) LEFT VERTICAL

DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .6020 .8390 .9250

X/CV

.000	.6530	.5262	.4910	.4031	.4535
.025	-.0302	-.3227	-.5182	-.7531	-.6986
.050	-.0248	-.3096	-.5758	-.7598	-.6895
.150	.0680	-.1243	-.2783	-.4764	-.6641
.300	.0059	-.1064	.0000	-.2115	-.2918
.520	-.1419	-.1745	-.2257	-.2062	-.1706
.685	-.4540	-.7177	-.6857	-.6895	-.6871
.775	-.3274	-.4801	-.6826	-.7125	-.7355
.900		-.3938	-.7076	-.7041	-.6922

ALPHAO ( 3 ) = .045 BETAO ( 1 ) = -6.157

SECTION ( 1 ) LEFT VERTICAL

DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .6020 .8390 .9250

X/CV

.000	.5291	.3584	.3617	.3711	.3019
.025	.5589	.4249	.3947	.3660	.3539
.050	.5235	.3854	.3516	.3421	.3164
.150	.3763	.2859	.2600	.2387	.1816
.300	.2179	.1833	.0000	.1579	.0708
.520	.0451	.0211	-.0007	-.0386	-.0930
.685	-.4188	-.6409	-.6557	-.6618	-.7206
.775	-.3127	-.4592	-.5991	-.6537	-.7108
.900		-.3390	-.5880	-.6537	-.6652

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## IABIA - PRESSURE SOURCE DATA TABULATION

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ARC11-019 IAB1 LVAP(ELHL SEALED) LEFT VERTICAL

(RETV18)

ALPHA0( 3) = .049 BETA0 ( 2) = -4.107

SECTION ( 1) LEFT VERTICAL DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.6090	.4575	.4525	.4414	.3920
.025	.4622	.3099	.2714	.2738	.2555
.050	.4507	.2998	.2546	.2613	.2376
.150	.3221	.2178	.1847	.1780	.1340
.300	.1601	.1190	.0000	.1129	.0378
.520	-.0084	-.0261	-.0315	-.0567	-.1075
.685	-.4165	-.6659	-.6740	-.6781	-.7327
.775	-.3220	-.4801	-.6254	-.6795	-.7337
.900		-.3478	-.6318	-.6829	-.6944

ALPHA0( 3) = .052 BETA0 ( 3) = -.012

SECTION ( 1) LEFT VERTICAL DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.6880	.5564	.5304	.4729	.4886
.025	.1011	-.0651	-.1860	-.1964	-.2558
.050	.2923	.1427	-.1244	-.1802	-.2141
.150	.2216	.0714	.0068	-.0047	-.0182
.300	.0642	-.0077	.0000	-.0155	-.0447
.520	-.0963	-.1149	-.1126	-.1112	-.1292
.685	-.4243	-.7156	-.7203	-.6951	-.7440
.775	-.3173	-.4569	-.6787	-.7250	-.7504
.900		-.3639	-.7044	-.7277	-.7178

ALPHA0( 3) = .069 BETA0 ( 4) = 4.104

SECTION ( 1) LEFT VERTICAL DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.5927	.4584	.4102	.3084	.3587
.025	-.1066	-.3551	-.5595	-.7619	-.7148
.050	-.0927	-.3690	-.6079	-.7731	-.7059
.150	.0100	-.1874	-.3442	-.5444	-.6784
.300	-.0399	-.1569	.0000	-.2361	-.3595
.520	-.1968	-.2280	-.2506	-.2626	-.2036
.685	-.4751	-.7092	-.7200	-.7199	-.7161
.775	-.3310	-.4823	-.7017	-.7287	-.7606
.900		-.4098	-.5897	-.7318	-.7246

ARC11-019 IAB1 LVAP(ELHL SEALED) LEFT VERTICAL

(RETV18)

ALPHA0( 3) = .076 BETA0( 5) = 6.162

SECTION ( 1) LEFT VERTICAL

DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .6020 .8390 .9250

X/CV

.000	.5043	.3570	.3105	.2060	.2740
.025	-.1938	-.4314	-.6482	-.7521	-.9299
.050	-.1633	-.4896	-.6702	-.7568	-.9176
.150	-.2818	-.3251	-.5471	-.6418	-.7861
.300	-.0455	-.2997	.0000	-.4927	-.5136
.520	-.2418	-.3078	-.4464	-.5126	-.4273
.685	-.5065	-.6364	-.7430	-.7892	-.8285
.775	-.3237	-.4814	-.7200	-.7712	-.8258
.900		-.4208	-.5461	-.5269	-.6407

ALPHA0( 4) = 4.250 BETA0( 1) = -4.085

SECTION ( 1) LEFT VERTICAL

DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .6020 .8390 .9250

X/CV

.000	.5623	.3986	.3715	.3550	.3049
.025	.3587	.2274	.1809	.1967	.1870
.050	.3638	.2244	.1704	.1859	.1697
.150	.2483	.1360	.1046	.1090	.0687
.300	.0954	.0408	.0000	.0530	-.0190
.520	-.0707	-.0874	-.0823	-.1091	-.1579
.685	-.4514	-.6876	-.6998	-.6989	-.7548
.775	-.3394	-.4727	-.6505	-.7037	-.7555
.900		-.3428	-.6569	-.7016	-.7098

ALPHA0( 4) = 4.253 BETA0( 2) = .000

SECTION ( 1) LEFT VERTICAL

DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .6020 .8390 .9250

X/CV

.000	.6383	.4818	.4459	.3844	.4012
.025	.0380	-.1256	-.2379	-.2521	-.3072
.050	.2352	.0793	-.2183	-.2383	-.2644
.150	.1559	.0017	-.0565	-.0640	-.0748
.300	-.0054	-.0819	.0000	-.0718	-.0955
.520	-.1605	-.1763	-.1652	-.1529	-.1713
.685	-.4390	-.6964	-.7428	-.7173	-.7641
.775	-.3184	-.4595	-.6991	-.7424	-.7747
.900		-.3858	-.6683	-.7468	-.7439

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## IAB1A - PRESSURE SOURCE DATA TABULATION

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ARC11-019 IAB1 LVAP(ELHL SEALED) LEFT VERTICAL

(RETV18)

ALPHA0( 4) = 4.255 BETA0 ( 3) = 4.115

SECTION ( 1) LEFT VERTICAL DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .6020 .8390 .9250

X/CV

.000	.5503	.3976	.3322	.2253	.2757
.025	-.1874	-.3868	-.5848	-.7556	-.7278
.050	-.1440	-.4233	-.6264	-.7583	-.7193
.150	-.0002	-.2364	-.3991	-.5696	-.6755
.300	-.0922	-.1955	.0000	-.3040	-.4132
.520	-.2720	-.2858	-.2814	-.3039	-.2361
.685	-.3515	-.5828	-.7566	-.7318	-.7607
.775	-.3075	-.4620	-.7194	-.7471	-.7824
.900		-.3964	-.4769	-.7539	-.7556

ALPHA0( 5) = 6.356 BETA0 ( 1) = .011

SECTION ( 1) LEFT VERTICAL DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .6020 .8390 .9250

X/CV

.000	.6365	.4557	.4082	.3356	.3518
.025	.0469	-.1346	-.2567	-.2651	-.3208
.050	.2344	.0448	-.2472	-.2560	-.2815
.150	.1513	-.0225	-.0872	-.0889	-.1012
.300	-.0271	-.1051	.0000	-.0910	-.1188
.520	-.1795	-.1946	-.1868	-.1764	-.1927
.685	-.4552	-.6721	-.7453	-.7196	-.7680
.775	-.3194	-.4544	-.7024	-.7436	-.7772
.900		-.4038	-.5820	-.7494	-.7487

ARC11-019 1A81 LVAP(ELHL SEALED) LEFT VERTICAL

(RETV19) ( 17 OCT 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 976.0000 IN. XT  
 LREF = 1297.0000 INCHES YMRP = .0000 IN. YT  
 BREF = 1297.0000 INCHES ZMRP = 400.0000 IN. ZT  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

MACH = 1.250 RN/FT = 2.250  
 ELV-18 = 10.000 ELV-08 = 4.000  
 RUDDER = .000 SPDBRK = .000

ALPHA0 ( 1 ) = -4.169 BETA0 ( 1 ) = -4.086

## SECTION ( 1 ) LEFT VERTICAL

## DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.7026	.5812	.5913	.5910	.5632
.025	.5611	.4512	.4081	.4154	.4010
.050	.5579	.4401	.3935	.4008	.3886
.150	.4557	.3506	.3226	.3270	.2909
.300	.3063	.2510	.0000	.2685	.2021
.520	.1307	.1168	.1295	.1191	.0693
.685	-.3924	-.4767	-.4700	-.4708	-.5206
.775	-.2615	-.4510	-.4402	-.4759	-.5270
.900		-.2846	-.4405	-.4826	-.5082

ALPHA0 ( 1 ) = -4.149 BETA0 ( 2 ) = .018

## SECTION ( 1 ) LEFT VERTICAL

## DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.7734	.6751	.6572	.6114	.6349
.025	.1954	.0668	-.0435	-.0565	-.1135
.050	.3933	.2679	-.0118	-.0403	-.0711
.150	.3452	.2001	.1372	.1439	.1324
.300	.1954	.1204	.0000	.1337	.1130
.520	.0315	.0178	.0372	.0575	.0460
.685	-.3814	-.5190	-.5053	-.4811	-.5200
.775	-.2745	-.4996	-.4837	-.5095	-.5305
.900		-.3100	-.5002	-.5155	-.5056

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## IAB1A - PRESSURE SOURCE DATA TABULATION

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ARC11-019 IAB1 LVAP(ELHL SEALED) LEFT VERTICAL

(RETV19)

ALPHA( 1) = -4.104 BETA( 3) = 4.148

SECTION ( 1) LEFT VERTICAL DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .6020 .8390 .9250

X/CV

.000	.6874	.5783	.5479	.4741	.5279
.025	-.0169	-.2082	-.4018	-.5879	-.6241
.050	.0032	-.2401	-.4371	-.5882	-.6030
.150	.0908	-.0628	-.1973	-.4355	-.5275
.300	.1058	-.0316	.0000	-.0959	-.1797
.520	-.0555	-.0828	-.1216	-.0802	-.0118
.685	-.3660	-.5618	-.5055	-.5202	-.5269
.775	-.2602	-.4091	-.5049	-.5368	-.5461
.900		-.3125	-.5421	-.5224	-.5311

ALPHA( 2) = .052 BETA( 1) = -4.119

SECTION ( 1) LEFT VERTICAL DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .6020 .8390 .9250

X/CV

.000	.6393	.5182	.5159	.5092	.4732
.025	.4842	.3882	.3355	.3460	.3386
.050	.4890	.3768	.3190	.3361	.3271
.150	.3914	.2863	.2555	.2647	.2334
.300	.2455	.1878	.0000	.2167	.1527
.520	.0777	.0627	.0798	.0723	.0287
.685	-.4071	-.4941	-.4861	-.4867	-.5332
.775	-.2628	-.4715	-.4576	-.4883	-.5396
.900		-.2905	-.4611	-.4985	-.5246

ALPHA( 2) = .055 BETA( 2) = -.007

SECTION ( 1) LEFT VERTICAL DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .6020 .8390 .9250

X/CV

.000	.7019	.6047	.5812	.5170	.5418
.025	.1092	.0126	-.0903	-.1065	-.1725
.050	.3171	.1862	-.0702	-.0925	-.1240
.150	.2815	.1426	.0815	.0796	.0758
.300	.1404	.0656	.0000	.0713	.0548
.520	-.0128	-.0327	-.0165	.0107	.0027
.685	-.3877	-.5448	-.5312	-.5041	-.5417
.775	-.2705	-.4698	-.5073	-.5251	-.5545
.900		-.3082	-.5264	-.5353	-.5312

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ARC11-019 IAB1 LVAP(ELHL SEALED) LEFT VERTICAL

(RETV19)

ALPHA0( 2) = .067 BETA0 ( 3) = 4.107

SECTION ( 1)LEFT VERTICAL DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .6020 .8390 .9250

X/CV

.000	.6245	.5171	.4869	.4038	.4538
.025	-.0868	-.2437	-.3952	-.5791	-.6080
.050	-.0616	-.2794	-.4311	-.5912	-.5959
.150	.0394	-.1122	-.2239	-.3920	-.5304
.300	.0608	-.0523	.0000	-.1252	-.1166
.520	-.0830	-.1045	-.1332	-.1146	-.0597
.685	-.3856	-.5769	-.5320	-.5343	-.5426
.775	-.2724	-.4155	-.5164	-.5461	-.5633
.900		-.3223	-.5600	-.5407	-.5547

ALPHA0( 3) = 4.242 BETA0 ( 1) = -4.090

SECTION ( 1)LEFT VERTICAL DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .6020 .8390 .9250

X/CV

.000	.5970	.4387	.4412	.4215	.3866
.025	.4139	.3238	.2707	.2723	.2698
.050	.4203	.3133	.2523	.2647	.2618
.150	.3298	.2269	.1954	.1998	.1699
.300	.1875	.1315	.0000	.1534	.0997
.520	.0343	.0208	.0335	.0241	-.0184
.685	-.4384	-.5150	-.5083	-.5035	-.5510
.775	-.2862	-.4902	-.4771	-.5095	-.5571
.900		-.2774	-.4790	-.5172	-.5450

ALPHA0( 3) = 4.243 BETA0 ( 2) = .004

SECTION ( 1)LEFT VERTICAL DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .6020 .8390 .9250

X/CV

.000	.6442	.5273	.4940	.4183	.4343
.025	.0174	-.0332	-.1374	-.1530	-.2165
.050	.2477	.0999	-.1278	-.1453	-.1715
.150	.2094	.0878	.0226	.0163	.0141
.300	.0824	.0108	.0000	.0223	.0023
.520	-.0670	-.0814	-.0687	-.0427	-.0475
.685	-.3772	-.5620	-.5512	-.5246	-.5642
.775	-.2632	-.4173	-.5267	-.5447	-.5763
.900		-.3114	-.5474	-.5536	-.5572

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IA81A - PRESSURE SOURCE DATA TABULATION

PAGE 585

ARC11-019 IA81 LVAP(ELHL SEALED) LEFT VERTICAL

(RETV19)

ALPHA0 ( 3 ) = 4.242 BETA0 ( 3 ) = 4.125

SECTION ( 1 ) LEFT VERTICAL

DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.5640	.4312	.4082	.3142	.3637
.025	-.1869	-.2928	-.4207	-.5904	-.6331
.050	-.1417	-.3183	-.4481	-.6057	-.6194
.150	-.0339	-.1706	-.2744	-.4053	-.5504
.300	.0075	-.0815	.0000	-.1540	-.1583
.520	-.1427	-.1522	-.1715	-.1737	-.1248
.685	-.3345	-.5757	-.5574	-.5564	-.5575
.775	-.2515	-.3985	-.5364	-.5625	-.5812
.900		-.3390	-.5739	-.5651	-.5713



ARC11-019 1A81 LVAP(ELHL SEALED) LEFT VERTICAL

(RETV20) ( 17 OCT 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 976.0000 IN. XT  
 LREF = 1297.0000 INCHES YMRP = .0000 IN. YT  
 BREF = 1297.0000 INCHES ZMRP = 400.0000 IN. ZT  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

MACH = 1.400 RN/FT = 2.250  
 ELV-IB = .000 ELV-OB = .000  
 RUDDER = .000 SPOBRK = .000

ALPHA0 ( 1 ) = .017 BETA0 ( 1 ) = -6.173

## SECTION ( 1 ) LEFT VERTICAL

## DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.5609	.4092	.4658	.4648	.4145
.025	.5810	.5214	.5021	.4921	.4789
.050	.5534	.4838	.4537	.4654	.4661
.150	.4540	.3849	.3707	.3833	.3707
.300	.3210	.2870	.0000	.3226	.2599
.520	.1769	.1752	.1949	.1808	.1554
.685	-.3353	-.3482	-.3374	-.3487	-.3900
.775	-.2819	-.3420	-.3216	-.3446	-.3869
.900	-.3092	-.3067	-.3502	-.3747	

ALPHA0 ( 1 ) = .018 BETA0 ( 2 ) = -4.117

## SECTION ( 1 ) LEFT VERTICAL

## DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.6337	.5332	.5457	.5243	.4007
.025	.4786	.4364	.3858	.3895	.3950
.050	.4867	.4209	.3653	.3777	.3764
.150	.4023	.3257	.3003	.3076	.3070
.300	.2765	.2311	.0000	.2615	.2209
.520	.1317	.1236	.1505	.1593	.1415
.685	-.3501	-.3729	-.3524	-.3496	-.3901
.775	-.2636	-.3735	-.3419	-.3521	-.3972
.900	-.3409	-.3385	-.3658	-.3923	

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## IABIA - PRESSURE SOURCE DATA TABULATION

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ARC11-019 IAB1 LVAP(ELHL SEALED) LEFT VERTICAL

(RETV20)

ALPHA0( 1) = .024 BETA0 ( 3) = -2.072

SECTION ( 1) LEFT VERTICAL

DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.6487	.6182	.6070	.5547	.5453
.025	.2621	.2701	.2042	.2302	.1876
.050	.3719	.3238	.2467	.2581	.2416
.150	.3251	.2597	.2188	.2281	.2211
.300	.2258	.1761	.0000	.1959	.1842
.520	.0778	.0726	.1052	.1258	.1274
.685	-.3606	-.3896	-.3710	-.3551	-.3952
.775	-.2675	-.3967	-.3630	-.3654	-.4104
.900	-.3463	-.3704	-.3809	-.3809	-.4033

ALPHA0( 1) = .023 BETA0 ( 4) = -.006

SECTION ( 1) LEFT VERTICAL

DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.6687	.6439	.6118	.5424	.5553
.025	.1241	.0730	-.0282	-.0341	-.0957
.050	.3075	.1669	-.0353	-.0399	-.0532
.150	.3112	.1896	.1397	.1388	.0954
.300	.1799	.1208	.0000	.1314	.1081
.520	.0455	.0335	.0517	.0858	.0951
.685	-.3687	-.4092	-.3896	-.3677	-.4012
.775	-.2597	-.4175	-.3813	-.3847	-.4143
.900	-.3292	-.3955	-.3969	-.3969	-.4006

ALPHA0( 1) = .030 BETA0 ( 5) = 2.059

SECTION ( 1) LEFT VERTICAL

DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.6368	.6270	.5805	.5000	.5326
.025	-.0085	-.1045	-.2687	-.3272	-.3634
.050	.0838	-.1135	-.2783	-.3281	-.3407
.150	.2484	.1203	.0128	-.0512	-.1524
.300	.1381	.0587	.0000	.0364	.0393
.520	-.0119	-.0259	-.0131	.0169	.0383
.685	-.3081	-.4371	-.4071	-.3858	-.3929
.775	-.2430	-.4260	-.4036	-.3973	-.4190
.900	-.3052	-.4263	-.4088	-.4088	-.4084

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ARC11-019 IA81 LVAP(ELHL SEALED) LEFT VERTICAL

(RETV20)

ALPHA( 1) = .032 BETA( 6) = 4.116

SECTION ( 1) LEFT VERTICAL

DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .6020 .8390 .9250

X/CV

.000	.6054	.5406	.5150	.4259	.4729
.025	-.0943	-.1578	-.3524	-.4818	-.5518
.050	-.0763	-.1810	-.3747	-.4774	-.5322
.150	.0120	-.0788	-.1838	-.3991	-.4182
.300	.1109	-.0429	.0000	-.1256	-.2945
.520	-.0323	-.0572	-.1030	-.0759	-.0270
.685	-.3657	-.4511	-.4146	-.4294	-.4085
.775	-.2709	-.4313	-.4146	-.4412	-.4359
.900		-.3246	-.4449	-.4381	-.4390

ALPHA( 1) = .044 BETA( 7) = 6.175

SECTION ( 1) LEFT VERTICAL

DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .6020 .8390 .9250

X/CV

.000	.5313	.4122	.4317	.3223	.3822
.025	-.1816	-.2238	-.3872	-.5179	-.5801
.050	-.1571	-.2374	-.3974	-.5331	-.5776
.150	-.2002	-.2150	-.3330	-.4674	-.5123
.300	.0522	-.2066	.0000	-.3194	-.4189
.520	-.0721	-.1574	-.2810	-.2626	-.2201
.685	-.3382	-.4470	-.4779	-.5027	-.4863
.775	-.2560	-.4027	-.4584	-.5217	-.5037
.900		-.3352	-.4801	-.5027	-.5148

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## IABIA - PRESSURE SOURCE DATA TABULATION

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ARC11-019 IAB1 LVAP(ELHL SEALED) LEFT VERTICAL

(RETV21) (17 OCT 75)

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 976.0000 IN. XT  
 LREF = 1297.0000 INCHES YMRP = .0000 IN. YT  
 BREF = 1297.0000 INCHES ZMRP = 400.0000 IN. ZT  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

MACH = 1.250 RN/FT = 2.250  
 ELV-18 = .000 ELV-08 = .000  
 RUDDER = .000 SPDBRK = .000

ALPHA0(1) = .038 BETA0(1) = -6.160

## SECTION (1) LEFT VERTICAL

## DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.5843	.4503	.4646	.4627	.4069
.025	.6011	.4988	.4538	.4434	.4390
.050	.5805	.4595	.4127	.4184	.4047
.150	.4611	.3576	.3322	.3291	.2864
.300	.2995	.2563	.0000	.2642	.1866
.520	.1408	.1226	.1280	.0947	.0458
.685	-.3967	-.4590	-.4643	-.4708	-.5195
.775	-.2630	-.4358	-.4311	-.4664	-.5175
.900		-.2842	-.4210	-.4730	-.5039

ALPHA0(1) = .045 BETA0(2) = -4.114

## SECTION (1) LEFT VERTICAL

## DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.6437	.5217	.5160	.5096	.4753
.025	.4798	.3813	.3300	.3411	.3315
.050	.4836	.3744	.3157	.3258	.3210
.150	.3906	.2830	.2493	.2573	.2276
.300	.2429	.1852	.0000	.2090	.1473
.520	.0758	.0611	.0798	.0692	.0246
.685	-.3910	-.5005	-.4909	-.4921	-.5393
.775	-.2621	-.4741	-.4630	-.4931	-.5457
.900		-.3008	-.4668	-.5058	-.5300

ARC11-019 1A81 LVAP(ELHL SEALED) LEFT VERTICAL

(RETV21)

ALPHA0( 1) = .047 BETA0 ( 3) = -2.070

SECTION ( 1) LEFT VERTICAL

DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.6831	.5897	.5693	.5283	.5250
.025	.2771	.2174	.1477	.1696	.1328
.050	.3822	.2809	.1971	.2020	.1852
.150	.3184	.2187	.1686	.1690	.1525
.300	.1984	.1268	.0000	.1360	.1058
.520	.0261	.0134	.0337	.0451	.0194
.685	-.3777	-.5194	-.5107	-.4926	-.5385
.775	-.2713	-.4912	-.4847	-.5050	-.5484
.900		-.3157	-.4999	-.5174	-.5290

ALPHA0( 1) = .054 BETA0 ( 4) = -.008

SECTION ( 1) LEFT VERTICAL

DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.7066	.6068	.5811	.5156	.5349
.025	.1139	.0190	-.0793	-.0958	-.1594
.050	.3238	.1978	-.0644	-.0812	-.1049
.150	.2826	.1475	.0828	.0790	.0769
.300	.1419	.0675	.0000	.0669	.0546
.520	-.0115	-.0279	-.0149	.0107	.0021
.685	-.3939	-.5440	-.5309	-.5056	-.5459
.775	-.2742	-.4879	-.5087	-.5257	-.5586
.900		-.3175	-.5306	-.5362	-.5370

ALPHA0( 1) = .082 BETA0 ( 5) = 2.056

SECTION ( 1) LEFT VERTICAL

DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.6802	.5908	.5453	.4630	.4919
.025	-.0148	-.1610	-.3471	-.4101	-.4304
.050	.1428	-.1556	-.2987	-.4086	-.4189
.150	.2230	.0788	-.0345	-.0608	-.0829
.300	.0939	.0051	.0000	-.0193	-.0234
.520	-.0713	-.0887	-.0741	-.0453	-.0326
.685	-.3170	-.5584	-.5346	-.5131	-.5345
.775	-.2419	-.4082	-.5194	-.5307	-.5542
.900		-.3161	-.5530	-.5418	-.5367

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1A81A - PRESSURE SOURCE DATA TABULATION

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ARC11-019 1A81 LVAP(ELHL SEALED) LEFT VERTICAL

(RETV21)

ALPHA0 ( 1 ) = .087 BETA0 ( 6 ) = 4.111

SECTION ( 1 ) LEFT VERTICAL DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.6226	.5187	.4730	.3977	.4461
.025	-.0898	-.2375	-.4305	-.5831	-.6180
.050	-.0612	-.2715	-.4632	-.5926	-.6005
.150	.0369	-.1154	-.2379	-.4175	-.5400
.300	.0617	-.0646	.0000	-.1271	-.1307
.520	-.0930	-.1255	-.1357	-.1202	-.0638
.685	-.3909	-.5809	-.5305	-.5355	-.5435
.775	-.2794	-.4149	-.5174	-.5457	-.5629
.900		-.3286	-.5619	-.5397	-.5546

ALPHA0 ( 1 ) = .091 BETA0 ( 7 ) = 6.170

SECTION ( 1 ) LEFT VERTICAL DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.5693	.4427	.4133	.3141	.3703
.025	-.1429	-.2707	-.4701	-.6339	-.7333
.050	-.1245	-.3107	-.4951	-.6530	-.7094
.150	-.2003	-.2064	-.3725	-.5306	-.6270
.300	.0852	-.1813	.0000	-.3484	-.4660
.520	-.1099	-.1864	-.2951	-.3060	-.2567
.685	-.4055	-.5522	-.5610	-.6054	-.6108
.775	-.2656	-.4292	-.5465	-.6057	-.6175
.900		-.3740	-.5915	-.5828	-.6159

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## IABIA - PRESSURE SOURCE DATA TABULATION

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ARC11-019 IAB1 LVAP(ELHL SEALED) LEFT VERTICAL

(RETV22) ( 17 OCT 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 976.0000 IN. XT  
 LREF = 1297.0000 INCHES YMRP = .0000 IN. YT  
 ØREF = 1297.0000 INCHES ZMRP = 400.0000 IN. ZT  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

MACH = 1.100 RN/FT = 2.250  
 ELV-18 = .000 ELV-08 = .000  
 RUDDER = .000 SPDBRK = .000

ALPHA( 1 ) = .039 BETA( 1 ) = -6.151

## SECTION ( 1 ) LEFT VERTICAL

## DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.5325	.3658	.3655	.3715	.3040
.025	.5528	.4189	.3861	.3655	.3461
.050	.5180	.3803	.3429	.3365	.3074
.150	.3745	.2821	.2508	.2349	.1755
.300	.2132	.1785	.0000	.1539	.0633
.520	.0387	.0139	-.0057	-.0452	-.0995
.685	-.3889	-.6478	-.6620	-.6732	-.7285
.775	-.3128	-.4309	-.6050	-.6644	-.7183
.900	-.3310	-.5948	-.6650	-.6650	-.6735

ALPHA( 1 ) = .042 BETA( 2 ) = -4.101

## SECTION ( 1 ) LEFT VERTICAL

## DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.6151	.4661	.4567	.4480	.3968
.025	.4573	.3092	.2712	.2708	.2470
.050	.4516	.3008	.2538	.2560	.2328
.150	.3227	.2128	.1825	.1743	.1286
.300	.1617	.1153	.0000	.1091	.0368
.520	-.0103	-.0255	-.0325	-.0557	-.1056
.685	-.3871	-.6613	-.6755	-.6745	-.7322
.775	-.3120	-.4493	-.6260	-.6789	-.7336
.900	-.3397	-.6348	-.6826	-.6826	-.6870

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## IAB1A - PRESSURE SOURCE DATA TABULATION

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ARC11-019 IAB1 LVAP(ELHL SEALED) LEFT VERTICAL

(RETV22)

ALPHA0( 1) = .047 BETA0 ( 3) = -2.062

SECTION ( 1) LEFT VERTICAL DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .6020 .8390 .9250

X/CV

.000	.6701	.5333	.5117	.4888	.4762
.025	.2834	.1368	.0790	.1096	.0570
.050	.3646	.2059	.1315	.1376	.1043
.150	.2648	.1396	.0995	.0972	.0614
.300	.1136	.0480	.0000	.0507	-.0042
.520	-.0674	-.0766	-.0651	-.0789	-.1111
.685	-.3911	-.6918	-.6965	-.6855	-.7383
.775	-.3153	-.4440	-.6521	-.7028	-.7416
.900		-.3571	-.6679	-.7075	-.6919

ALPHA0( 1) = .053 BETA0 ( 4) = -.007

SECTION ( 1) LEFT VERTICAL DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .6020 .8390 .9250

X/CV

.000	.6843	.5521	.5336	.4811	.4968
.025	.1030	-.0605	-.1638	-.1806	-.2387
.050	.2891	.1458	-.1059	-.1601	-.1883
.150	.2180	.0729	.0167	.0073	-.0082
.300	.0612	-.0065	.0000	-.0065	-.0359
.520	-.0966	-.1109	-.1039	-.1038	-.1221
.685	-.4135	-.7080	-.7114	-.6875	-.7362
.775	-.3154	-.4507	-.6706	-.7169	-.7443
.900		-.3625	-.6959	-.7193	-.7108

ALPHA0( 1) = .079 BETA0 ( 5) = 2.058

SECTION ( 1) LEFT VERTICAL DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .6020 .6390 .9250

X/CV

.000	.6572	.5273	.4943	.4138	.4408
.025	-.0392	-.2667	-.4672	-.5302	-.4519
.050	.1206	-.2566	-.4083	-.5211	-.4384
.150	.1572	-.0105	-.1126	-.1284	-.2720
.300	.0008	-.0836	.0000	-.0941	-.1006
.520	-.1607	-.1688	-.1621	-.1485	-.1400
.685	-.3821	-.6656	-.7175	-.6895	-.7239
.775	-.2926	-.4568	-.6882	-.7185	-.7428
.900		-.3928	-.7104	-.7246	-.7108

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ARC11-019 IAB1 LVAP(ELHL SEALED) LEFT VERTICAL

(RETV22)

ALPHA0( 1) = .083 BETA0 ( 6) = 4.107

SECTION ( 1) LEFT VERTICAL		DEPENDENT VARIABLE CP			
Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.5947	.4593	.4126	.3119	.3571
.025	-.1062	-.3470	-.5513	-.7544	-.7071
.050	-.0873	-.3628	-.6011	-.7668	-.6986
.150	.0105	-.1814	-.3357	-.5382	-.6675
.300	-.0354	-.1524	.0000	-.2332	-.3550
.520	-.1925	-.2252	-.2423	-.2582	-.2007
.685	-.4613	-.6810	-.7133	-.7149	-.7122
.775	-.3220	-.4731	-.6968	-.7260	-.7558
.900		-.4010	-.6190	-.7287	-.7189

ALPHA0( 1) = .090 BETA0 ( 7) = 6.163

SECTION ( 1) LEFT VERTICAL		DEPENDENT VARIABLE CP			
Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.4952	.3499	.3066	.2022	.2671
.025	-.2016	-.4366	-.6532	-.7576	-.9357
.050	-.1719	-.4951	-.6708	-.7637	-.9245
.150	-.2861	-.3288	-.5535	-.6481	-.8000
.300	-.0518	-.3082	.0000	-.4967	-.5140
.520	-.2483	-.3115	-.4474	-.5174	-.4360
.685	-.4991	-.6184	-.7475	-.7922	-.8322
.775	-.3064	-.4765	-.7225	-.7695	-.8261
.900		-.4193	-.5302	-.5154	-.5999

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## IABIA - PRESSURE SOURCE DATA TABULATION

PAGE 595

ARC11-019 IAB1 LVAP(ELHL SEALED) LEFT VERTICAL

(RETV23) ( 17 OCT 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 976.0000 IN. XT  
 LREF = 1297.0000 INCHES YMRP = .0000 IN. YT  
 BREF = 1297.0000 INCHES ZMRP = 400.0000 IN. ZT  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

MACH = 1.400 RN/FT = 2.250  
 ELV-1B = .000 ELV-0B = .000  
 RUDDER = .000 SPDBRK = .000

BETA0 ( 1 ) = .033 ALPHA0( 1 ) = -6.272

SECTION ( 1 ) LEFT VERTICAL		DEPENDENT VARIABLE CP			
Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.8092	.7517	.7352	.6851	.7085
.025	.2396	.1526	.0467	.0276	-.0446
.050	.4359	.3142	.0708	.0344	.0082
.150	.4130	.2800	.2166	.2237	.2101
.300	.2700	.2026	.0000	.2049	.1884
.520	.1161	.1042	.1272	.1527	.1496
.685	-.3340	-.3800	-.3608	-.3385	-.3717
.775	-.2616	-.3887	-.3552	-.3600	-.3860
.900		-.3438	-.3657	-.3712	-.3680

BETA0 ( 1 ) = .011 ALPHA0( 2 ) = -4.160

SECTION ( 1 ) LEFT VERTICAL		DEPENDENT VARIABLE CP			
Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.7662	.7195	.6966	.6394	.6551
.025	.2057	.1256	.0210	.0043	-.0611
.050	.4002	.2747	.0470	.0114	-.0145
.150	.3814	.2511	.1945	.1973	.1847
.300	.2434	.1744	.0000	.1784	.1626
.520	.0925	.0785	.1023	.1344	.1307
.685	-.3421	-.3871	-.3651	-.3438	-.3760
.775	-.2505	-.3966	-.3589	-.3627	-.3909
.900		-.3336	-.3710	-.3757	-.3742

ARC11-019 IAB1 LVAP(ELHL SEALED) LEFT VERTICAL

(RETV23)

BETA0 ( 1 ) = -.007 ALPHA0( 3 ) = -2.069

SECTION ( 1 ) LEFT VERTICAL		DEPENDENT VARIABLE CP			
Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.7240	.6850	.6555	.5931	.6049
.025	.1646	.0990	-.0064	-.0194	-.0824
.050	.3606	.2107	.0044	-.0191	-.0365
.150	.3476	.2196	.1673	.1673	.1590
.300	.2110	.1469	.0000	.1531	.1342
.520	.0665	.0542	.0764	.1096	.1090
.685	-.3521	-.3988	-.3759	-.3543	-.3872
.775	-.2539	-.4056	-.3685	-.3720	-.4024
.900		-.3335	-.3818	-.3859	-.3865

BETA0 ( 1 ) = -.022 ALPHA0( 4 ) = .024

SECTION ( 1 ) LEFT VERTICAL		DEPENDENT VARIABLE CP			
Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.6627	.6373	.6108	.5425	.5504
.025	.1189	.0647	-.0339	-.0388	-.1065
.050	.3068	.1626	-.0339	-.0416	-.0587
.150	.3052	.1864	.1369	.1369	.1270
.300	.1750	.1168	.0000	.1282	.1093
.520	.0389	.0295	.0493	.0795	.0770
.685	-.3734	-.4132	-.3924	-.3724	-.4057
.775	-.2649	-.4200	-.3832	-.3895	-.4197
.900		-.3262	-.3983	-.4029	-.4057

BETA0 ( 1 ) = -.018 ALPHA0( 5 ) = 2.134

SECTION ( 1 ) LEFT VERTICAL		DEPENDENT VARIABLE CP			
Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.6064	.5955	.5677	.4958	.5097
.025	-.0203	.0299	-.0548	-.0635	-.1151
.050	.2180	.0928	-.0588	-.0697	-.0757
.150	.2568	.1650	.1065	.1071	.1071
.300	.1470	.0932	.0000	.1012	.0879
.520	.0200	.0047	.0241	.0616	.0585
.685	-.3854	-.4240	-.4039	-.3785	-.4102
.775	-.2685	-.4324	-.3953	-.3937	-.4235
.900		-.3250	-.4111	-.4080	-.4127

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## IABIA - PRESSURE SOURCE DATA TABULATION

PAGE 597

ARC11-019 IAB1 LVAP(ELHL SEALED) LEFT VERTICAL

(RETV23)

BETA0 ( 1 ) = -.008 ALPHA0( 6 ) = 4.218

SECTION ( 1 ) LEFT VERTICAL		DEPENDENT VARIABLE CP			
Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.5883	.5564	.5234	.4494	.4529
.025	-.0402	.0177	-.0653	-.0715	-.1353
.050	.2085	.0874	-.0700	-.0783	-.0965
.150	.2268	.1424	.0811	.0820	.0727
.300	.1230	.0678	.0000	.0761	.0581
.520	-.0067	-.0195	.0015	.0307	.0276
.685	-.3865	-.4343	-.4145	-.3968	-.4276
.775	-.2673	-.4408	-.4052	-.4098	-.4412
.900		-.3210	-.4213	-.4248	-.4316

BETA0 ( 1 ) = -.002 ALPHA0( 7 ) = 5.273

SECTION ( 1 ) LEFT VERTICAL		DEPENDENT VARIABLE CP			
Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.5622	.5393	.5004	.4266	.4283
.025	-.0392	.0106	-.0702	-.0816	-.1423
.050	.2142	.0796	-.0795	-.0860	-.1087
.150	.2250	.1310	.0708	.0692	.0606
.300	.1151	.0575	.0000	.0633	.0475
.520	-.0089	-.0257	-.0081	.0177	.0168
.685	-.3879	-.4353	-.4161	-.4010	-.4302
.775	-.2741	-.4412	-.4072	-.4141	-.4455
.900		-.3215	-.4238	-.4287	-.4361

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ARC11-019 IAB1 LVAP(ELHL SEALED) LEFT VERTICAL

(RETV24) ( 17 OCT 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 976.0000 IN. XT  
 LREF = 1297.0000 INCHES YMRP = .0000 IN. YT  
 BREF = 1297.0000 INCHES ZMRP = 400.0000 IN. ZT  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

MACH = 1.250 RN/FT = 2.250  
 ELV-1B = .000 ELV-0B = .000  
 RUDDER = .000 SPDBRK = .000

BETA0 ( 1 ) = .028 ALPHA0 ( 1 ) = -6.248

SECTION ( 1 ) LEFT VERTICAL DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.8015	.7114	.6993	.6632	.6815
.025	.2380	.1006	-.0143	-.0235	-.0690
.050	.4296	.2970	.0263	.0000	-.0317
.150	.3776	.2316	.1717	.1806	.1609
.300	.2250	.1492	.0000	.1625	.1412
.520	.0641	.0494	.0668	.0864	.0711
.685	-.3515	-.5042	-.4918	-.4692	-.5081
.775	-.2665	-.4855	-.4697	-.4972	-.5173
.900		-.3046	-.4849	-.5014	-.4899

BETA0 ( 1 ) = .001 ALPHA0 ( 2 ) = -4.131

SECTION ( 1 ) LEFT VERTICAL DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.7743	.6773	.6611	.6137	.6340
.025	.2001	.0739	-.0316	-.0478	-.1012
.050	.3968	.2801	-.0034	-.0268	-.0560
.150	.3469	.2033	.1453	.1473	.1343
.300	.1966	.1234	.0000	.1355	.1136
.520	.0358	.0239	.0401	.0597	.0479
.685	-.3522	-.5153	-.5044	-.4798	-.5217
.775	-.2693	-.4868	-.4816	-.5069	-.5319
.900		-.3058	-.4990	-.5126	-.5058

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## IAB1A - PRESSURE SOURCE DATA TABULATION

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ARC11-019 IAB1 LVAP(ELHL SEALED) LEFT VERTICAL

(RETV24)

BETA0 ( 1 ) = -.012 ALPHAO( 3 ) = -2.038

SECTION ( 1 ) LEFT VERTICAL		DEPENDENT VARIABLE CP				
Z/BV	.1580	.3170	.6020	.8390	.9250	
X/CV						
.000	.7438	.6426	.6184	.5635	.5852	
.025	.1694	.0469	-.0643	-.0741	-.1400	
.050	.3687	.2424	-.0348	-.0595	-.0859	
.150	.3192	.1711	.1112	.1131	.1050	
.300	.1694	.0928	.0000	.1007	.0843	
.520	.0097	-.0059	.0157	.0333	.0237	
.685	-.3698	-.5312	-.5166	-.4925	-.5326	
.775	-.2702	-.4900	-.4941	-.5167	-.5434	
.900		-.3098	-.5141	-.5253	-.5199	

BETA0 ( 1 ) = -.024 ALPHAO( 4 ) = .059

SECTION ( 1 ) LEFT VERTICAL		DEPENDENT VARIABLE CP				
Z/BV	.1580	.3170	.6020	.8390	.9250	
X/CV						
.000	.7111	.6076	.5814	.5181	.5370	
.025	.1218	.0253	-.0731	-.0883	-.1572	
.050	.3258	.2037	-.0560	-.0791	-.1062	
.150	.2878	.1511	.0867	.0830	.0769	
.300	.1465	.0724	.0000	.0712	.0558	
.520	-.0083	-.0258	-.0116	.0124	.0032	
.685	-.3856	-.5398	-.5273	-.5041	-.5451	
.775	-.2682	-.4802	-.5048	-.5255	-.5579	
.900		-.3134	-.5270	-.5360	-.5365	

BETA0 ( 1 ) = -.019 ALPHAO( 5 ) = 2.162

SECTION ( 1 ) LEFT VERTICAL		DEPENDENT VARIABLE CP				
Z/BV	.1580	.3170	.6020	.8390	.9250	
X/CV						
.000	.6505	.5718	.5400	.4711	.4820	
.025	.0480	.0010	-.1029	-.1165	-.1738	
.050	.2707	.1566	-.0879	-.1095	-.1260	
.150	.2411	.1219	.0549	.0492	.0472	
.300	.1176	.0428	.0000	.0416	.0280	
.520	-.0355	-.0543	-.0394	-.0140	-.0219	
.685	-.3849	-.5540	-.5381	-.5103	-.5507	
.775	-.2680	-.4572	-.5156	-.5313	-.5635	
.900		-.3191	-.5387	-.5425	-.5437	

ARC11-019 IAB1 LVAP(ELHL SEALED) LEFT VERTICAL

(RETV24)

BETA0 ( 1) = -.013 ALPHA0( 6) = 4.248

SECTION ( 1) LEFT VERTICAL DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.6555	.5333	.4965	.4197	.4318
.025	.0266	-.0195	-.1247	-.1387	-.1961
.050	.2631	.1253	-.1126	-.1272	-.1505
.150	.2199	.0926	.0249	.0217	.0175
.300	.0888	.0125	.0000	.0173	.0035
.520	-.0614	-.0783	-.0631	-.0399	-.0478
.685	-.3807	-.5620	-.5493	-.5239	-.5641
.775	-.2684	-.4378	-.5255	-.5434	-.5753
.900		-.3213	-.5493	-.5552	-.5580

BETA0 ( 1) = .001 ALPHA0( 7) = 6.352

SECTION ( 1) LEFT VERTICAL DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.6630	.5137	.4485	.3679	.3825
.025	.0593	-.0303	-.1389	-.1522	-.2118
.050	.2767	.0997	-.1386	-.1500	-.1684
.150	.2118	.0680	-.0029	-.0064	-.0092
.300	.0628	-.0127	.0000	-.0070	-.0204
.520	-.0843	-.1043	-.0864	-.0638	-.0724
.685	-.3899	-.5724	-.5579	-.5362	-.5727
.775	-.2695	-.4154	-.5328	-.5537	-.5854
.900		-.3248	-.5570	-.5655	-.5701

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## 1A81A - PRESSURE SOURCE DATA TABULATION

PAGE 601

ARC11-019 1A81 LVAP(ELHL SEALED) LEFT VERTICAL

(RETV25) ( 17 OCT 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 976.0000 IN. XT  
 LREF = 1297.0000 INCHES YMRP = .0000 IN. YT  
 BREF = 1297.0000 INCHES ZMRP = 400.0000 IN. ZT  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

MACH = 1.100 RN/FT = 2.250  
 ELV-18 = .000 ELV-08 = .000  
 RUDDER = .000 SPOBRK = .000

BETA0 ( 1 ) = .018 ALPHA0 ( 1 ) = -6.220

## SECTION ( 1 ) LEFT VERTICAL

## DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.7556	.6475	.6489	.6125	.6231
.025	.2264	.0130	-.1109	-.1183	-.1882
.050	.3770	.1917	-.0367	-.0802	-.1418
.150	.2919	.1486	.0980	.0797	.0696
.300	.1309	.0750	.0000	.0639	.0367
.520	-.0207	-.0447	-.0377	-.0378	-.0575
.685	-.3895	-.6945	-.6898	-.6645	-.7092
.775	-.3196	-.4671	-.6517	-.7001	-.7153
.900		-.3565	-.6702	-.6973	-.6746

BETA0 ( 1 ) = .000 ALPHA0 ( 2 ) = -4.109

## SECTION ( 1 ) LEFT VERTICAL

## DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.7315	.6137	.6099	.5724	.5822
.025	.1838	-.0134	-.1402	-.1436	-.2186
.050	.3440	.1764	-.0681	-.1163	-.1593
.150	.2668	.1161	.0683	.0554	.0393
.300	.1056	.0400	.0000	.0375	.0139
.520	-.0515	-.0698	-.0584	-.0554	-.0774
.685	-.3863	-.6966	-.6919	-.6704	-.7150
.775	-.3125	-.4484	-.6521	-.7049	-.7208
.900		-.3557	-.6723	-.7039	-.6822

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ARC11-019 IAB1 LVAP(ELHL SEALED) LEFT VERTICAL

(RETV25)

BETA0 ( 1 ) = -.015 ALPHA0( 3 ) = -2.020

SECTION ( 1 ) LEFT VERTICAL

DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.7112	.5840	.5682	.5196	.5380
.025	.1414	-.0429	-.1573	-.1742	-.2329
.050	.3172	.1599	-.0938	-.1512	-.1891
.150	.2424	.0906	.0379	.0255	.0121
.300	.0812	.0156	.0000	.0103	-.0129
.520	-.0764	-.0935	-.0894	-.0834	-.1024
.685	-.4007	-.7082	-.7116	-.6829	-.7320
.775	-.3219	-.4461	-.6707	-.7154	-.7395
.900		-.3623	-.6937	-.7164	-.7042

BETA0 ( 1 ) = -.024 ALPHA0( 4 ) = .066

SECTION ( 1 ) LEFT VERTICAL

DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.6882	.5595	.5314	.4757	.4892
.025	.0998	-.0668	-.1839	-.1967	-.2524
.050	.2887	.1366	-.1221	-.1839	-.2148
.150	.2188	.0707	.0092	-.0033	-.0185
.300	.0579	-.0097	.0000	-.0151	-.0453
.520	-.1003	-.1157	-.1103	-.1111	-.1297
.685	-.4106	-.7125	-.7186	-.6954	-.7432
.775	-.3146	-.4532	-.6771	-.7259	-.7516
.900		-.3581	-.7037	-.7283	-.7191

BETA0 ( 1 ) = -.019 ALPHA0( 5 ) = 2.167

SECTION ( 1 ) LEFT VERTICAL

DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.6517	.5182	.4902	.4284	.4470
.025	.0444	-.0978	-.2090	-.2213	-.2779
.050	.2468	.1029	-.1600	-.2152	-.2304
.150	.1831	.0326	-.0215	-.0332	-.0459
.300	.0301	-.0444	.0000	-.0451	-.0686
.520	-.1340	-.1479	-.1374	-.1286	-.1476
.685	-.4143	-.6988	-.7322	-.7056	-.7548
.775	-.3124	-.4537	-.6890	-.7317	-.7657
.900		-.3716	-.7106	-.7365	-.7341

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## IAB1A - PRESSURE SOURCE DATA TABULATION

PAGE 603

ARC11-019 IAB1 LVAP(ELHL SEALED) LEFT VERTICAL

(RETV25)

BETAO ( 1 ) = -.015    ALPHAO( 6 ) = 4.256

SECTION ( 1 ) LEFT VERTICAL			DEPENDENT VARIABLE CP		
Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.6387	.4821	.4453	.3825	.3995
.025	.0399	-.1239	-.2377	-.2509	-.3050
.050	.2367	.0797	-.2107	-.2350	-.2596
.150	.1563	.0002	-.0565	-.0629	-.0738
.300	-.0057	-.0791	.0000	-.0724	-.0931
.520	-.1603	-.1743	-.1625	-.1513	-.1675
.685	-.4243	-.6716	-.7388	-.7133	-.7590
.775	-.3068	-.4513	-.6959	-.7363	-.7698
.900		-.3868	-.6730	-.7424	-.7393

BETAO ( 1 ) = .000    ALPHAO( 7 ) = 6.355

SECTION ( 1 ) LEFT VERTICAL			DEPENDENT VARIABLE CP		
Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.6403	.4551	.4012	.3335	.3475
.025	.0465	-.1365	-.2602	-.2710	-.3235
.050	.2346	.0492	-.2463	-.2571	-.2862
.150	.1485	-.0236	-.0885	-.0911	-.1038
.300	-.0322	-.1091	.0000	-.0978	-.1221
.520	-.1825	-.2010	-.1896	-.1798	-.1967
.685	-.4458	-.6289	-.7503	-.7270	-.7705
.775	-.3131	-.4430	-.7074	-.7507	-.7806
.900		-.4089	-.5727	-.7565	-.7515

ARC11-019 IAB1 LVAP(ELHL SEALED) LEFT VERTICAL

(RETV26) ( 17 OCT 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 976.0000 IN. XT  
 LREF = 1297.0000 INCHES YMRP = .0000 IN. YT  
 BREF = 1297.0000 INCHES ZMRP = 400.0000 IN. ZT  
 SCALE = .0300 SCALE

ALPHA( 1 ) = -6.182 BETA( 1 ) = -4.055

## PARAMETRIC DATA

MACH = .900 RN/FT = 2.250  
 ELV-18 = .000 ELV-08 = .000  
 RUDDER = .000 SPDBRK = .000

## SECTION ( 1 ) LEFT VERTICAL DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.4869	.3580	.3913	.4305	.3517
.025	.3780	.2480	.2522	.2358	.1721
.050	.3591	.2366	.2219	.2072	.1531
.150	.2128	.1438	.1203	.0853	.0168
.300	.0680	.0362	.0000	-.0241	-.1133
.520	-.1467	-.1643	-.1965	-.2510	-.3210
.685	-.3456	-.6645	-1.0405	-.8160	-.5831
.775	-.2624	-.3196	-.8172	-.6650	-.4789
.900		-.2760	-.2656	-.4504	-.3319

ALPHA( 1 ) = -6.173 BETA( 2 ) = -2.019

## SECTION ( 1 ) LEFT VERTICAL DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.5529	.4453	.4904	.5010	.4633
.025	.2362	.0610	.0484	.0590	-.0383
.050	.2660	.1131	.0842	.0812	.0162
.150	.1361	.0586	.0352	.0039	-.0425
.300	-.0066	-.0421	.0000	-.0791	-.1371
.520	-.1965	-.2118	-.2292	-.2635	-.3075
.635	-.3395	-.5554	-1.0752	-.7651	-.5077
.775	-.2636	-.3461	-.8813	-.6614	-.4642
.900		-.2805	-.2526	-.4899	-.3355

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## 1A81A - PRESSURE SOURCE DATA TABULATION

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ARC11-019 1A81 LVAP(ELHL SEALED) LEFT VERTICAL

(RETV26)

ALPHA0( 1) = -6.160 BETA0( 3) = .037

SECTION ( 1) LEFT VERTICAL

DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.5720	.4779	.5229	.4926	.4972
.025	.0014	-.2288	-.3316	-.3420	-.4318
.050	.1506	-.0177	-.2438	-.3021	-.3719
.150	.0538	-.0548	-.0947	-.1273	-.1385
.300	-.0973	-.1311	.0000	-.1568	-.1964
.520	-.2644	-.2737	-.2994	-.3110	-.3305
.685	-.3516	-.6395	-1.0972	-.6296	-.6277
.775	-.2686	-.3757	-.5701	-.5142	-.2941
.900		-.2918	-.3592	-.3934	-.2167

ALPHA0( 1) = -6.132 BETA0( 4) = 2.107

SECTION ( 1) LEFT VERTICAL

DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.5426	.4376	.4512	.3894	.4243
.025	-.1311	-.4860	-.8404	-.8495	-.6943
.050	-.0075	-.4549	-.6285	-.7275	-.6787
.150	-.0254	-.1607	-.2649	-.3150	-.4075
.300	-.1729	-.2244	.0000	-.2756	-.2622
.520	-.3238	-.3563	-.3601	-.3501	-.3531
.685	-.3791	-.5072	-1.0243	-.6422	-.5882
.775	-.2646	-.4234	-.5080	-.4364	-.3007
.900		-.2964	-.3392	-.3201	-.2181

ALPHA0( 1) = -6.123 BETA0( 5) = 4.151

SECTION ( 1) LEFT VERTICAL

DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.4789	.3435	.3231	.2243	.2887
.025	-.2496	-.6438	-.8985	-.9750	-1.1486
.050	-.2554	-.6010	-.9419	-1.0052	-1.1379
.150	-.1797	-.3944	-.5354	-.7660	-.9795
.300	-.2370	-.3620	.0000	-.5848	-.5487
.520	-.3921	-.4249	-.5318	-.5514	-.4118
.685	-.4314	-.5152	-.6771	-.3835	-.3260
.775	-.2703	-.3997	-.4235	-.2886	-.2322
.900		-.3094	-.2800	-.2163	-.1682

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ARC11-019 IAB1 LVAP(ELHL SEALED) LEFT VERTICAL

(RETV26)

ALPHA0( 2) = -4.098 BETA0 ( 1) = -6.117

SECTION ( 1) LEFT VERTICAL DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.3512	.1926	.2268	.2737	.1842
.025	.4592	.3539	.3577	.3180	.2863
.050	.4137	.3104	.2994	.2771	.2360
.150	.2585	.2045	.1795	.1362	.0699
.300	.1142	.0808	.0000	.0105	-.0777
.520	-.1042	-.1351	-.1848	-.2226	-.3017
.685	-.3375	-.6397	-.9822	-.9911	-.9501
.775	-.2580	-.2978	-.3965	-.8526	-.6811
.900		-.2535	-.2394	-.3944	-.3986

ALPHA0( 2) = -4.086 BETA0 ( 2) = -4.069

SECTION ( 1) LEFT VERTICAL DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.4510	.3104	.3404	.3785	.2971
.025	.3436	.2117	.2354	.2150	.1606
.050	.3199	.2018	.1994	.1879	.1326
.150	.1762	.1155	.0990	.0660	-.0039
.300	.0374	.0070	.0000	-.0449	-.1370
.520	-.1696	-.1911	-.2183	-.2735	-.3442
.685	-.3293	-.6629	-1.0235	-.8071	-.5048
.775	-.2607	-.3065	-.4515	-.6468	-.4543
.900		-.2674	-.2488	-.3880	-.3221

ALPHA0( 2) = -4.071 BETA0 ( 3) = .025

SECTION ( 1) LEFT VERTICAL DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.5486	.4351	.4925	.4623	.4588
.025	-.0330	-.2542	-.3531	-.3511	-.4565
.050	.1210	-.0487	-.2511	-.2992	-.3925
.150	.0201	-.0842	-.1067	-.1365	-.1548
.300	-.1289	-.1522	.0000	-.1583	-.2123
.520	-.2787	-.2774	-.3046	-.3258	-.3511
.685	-.3360	-.5944	-1.0447	-.6445	-.6011
.775	-.2626	-.3676	-.5245	-.5148	-.2940
.900		-.2809	-.3328	-.3760	-.2100

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ARC11-019 1A81 LVAP(ELHL SEALED) LEFT VERTICAL

(RETV26)

ALPHA0( 2) = -4.050 BETA0( 4) = 4.127

SECTION ( 1) LEFT VERTICAL DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .6020 .8390 .9250

X/CV

.000	.4465	.3088	.2881	.1753	.2401
.025	-.2948	-.6751	-.9167	-.9767	-1.0280
.050	-.2952	-.6415	-.9570	-.9946	-1.0383
.150	-.1776	-.4151	-.5710	-.7925	-.9489
.300	-.2761	-.3812	.0000	-.6150	-.6690
.520	-.4327	-.4333	-.5553	-.5509	-.4580
.685	-.3949	-.4892	-.6105	-.4030	-.3070
.775	-.2700	-.3732	-.4323	-.3093	-.2300
.900		-.2987	-.2880	-.2355	-.1642

ALPHA0( 2) = -4.048 BETA0( 5) = 6.181

SECTION ( 1) LEFT VERTICAL DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .6020 .8390 .9250

X/CV

.000	.3201	.1680	.1516	.0180	.1081
.025	-.3868	-.7681	-1.0129	-1.1386	-1.2405
.050	-.3769	-.8378	-1.0323	-1.1542	-1.2576
.150	-.5237	-.5816	-.8804	-1.0696	-1.1864
.300	-.2846	-.5486	.0000	-.7192	-.8171
.520	-.4730	-.5376	-.8129	-.4783	-.5142
.685	-.4554	-.5315	-.6772	-.3720	-.3633
.775	-.2583	-.4324	-.5001	-.2928	-.2998
.900		-.3659	-.3355	-.2478	-.2348

ALPHA0( 3) = -2.011 BETA0( 1) = -6.126

SECTION ( 1) LEFT VERTICAL DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .6020 .8390 .9250

X/CV

.000	.3249	.1538	.1731	.2185	.1206
.025	.4269	.3269	.3276	.2927	.2597
.050	.3873	.2827	.2743	.2558	.2096
.150	.2325	.1780	.1536	.1196	.0403
.300	.0876	.0638	.0000	-.0043	-.1027
.520	-.1204	-.1506	-.2010	-.2495	-.3328
.685	-.3334	-.5926	-.9383	-.9486	-.8743
.775	-.2470	-.2861	-.3675	-.6180	-.6016
.900		-.2457	-.2219	-.3137	-.3725

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ARC11-019 1A81 LVAP(ELHL SEALED) LEFT VERTICAL

(RETV26)

ALPHA0( 3) = -1.998 BETA0 ( 2) = -2.045

SECTION ( 1) LEFT VERTICAL		DEPENDENT VARIABLE CP			
Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.4966	.3628	.4114	.4268	.3894
.025	.1602	-.0032	.0227	.0441	-.0476
.050	.1963	.0544	.0503	.0505	-.0077
.150	.0692	-.0019	.0038	-.0241	-.0741
.300	-.0722	-.0798	.0000	-.1049	-.1679
.520	-.2357	-.2310	-.2579	-.2939	-.3387
.685	-.3168	-.5694	-1.0078	-.7449	-.4402
.775	-.2429	-.3191	-.4394	-.6352	-.4117
.900		-.2507	-.2587	-.3968	-.3051

ALPHA0( 3) = -1.984 BETA0 ( 3) = 2.071

SECTION ( 1) LEFT VERTICAL		DEPENDENT VARIABLE CP			
Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.4847	.3650	.3677	.3086	.3366
.025	-.1971	-.5584	-.8200	-.8227	-.7007
.050	-.0576	-.4887	-.7176	-.7423	-.6861
.150	-.0877	-.2378	-.2900	-.3288	-.4768
.300	-.2505	-.2903	.0000	-.2983	-.2865
.520	-.3831	-.3665	-.3794	-.3805	-.3786
.685	-.3263	-.4434	-.7892	-.5582	-.4183
.775	-.2505	-.3859	-.4636	-.4199	-.2785
.900		-.2869	-.2999	-.2793	-.1651

ALPHA0( 3) = -1.975 BETA0 ( 4) = 6.155

SECTION ( 1) LEFT VERTICAL		DEPENDENT VARIABLE CP			
Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.2937	.1339	.1041	-.0276	.0508
.025	-.4084	-.7830	-1.0268	-1.1268	-1.1516
.050	-.3857	-.8544	-1.0481	-1.1302	-1.1619
.150	-.5272	-.6206	-.8913	-1.0120	-1.0936
.300	-.3097	-.5633	.0000	-.7249	-.6709
.520	-.4953	-.5322	-.8098	-.5904	-.6141
.685	-.4278	-.4969	-.6268	-.3611	-.3885
.775	-.2513	-.4122	-.4784	-.2929	-.2953
.900		-.3386	-.3121	-.2692	-.2234

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ARC11-019 IAB1 LVAP(ELHL SEALED) LEFT VERTICAL

(RETV26)

ALPHA( 4) = .071 BETA( 1) = -6.134

SECTION ( 1) LEFT VERTICAL DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.3156	.1103	.1220	.1592	.0595
.025	.3981	.2936	.3122	.2754	.2421
.050	.3601	.2616	.2564	.2378	.1914
.150	.2050	.1603	.1394	.1034	.0267
.300	.0661	.0434	.0000	-.0105	-.1136
.520	-.1339	-.1578	-.2155	-.2642	-.3427
.685	-.3366	-.5694	-.8363	-.9279	-.8482
.775	-.2465	-.2805	-.3446	-.5954	-.5760
.900		-.2429	-.2178	-.2764	-.3202

ALPHA( 4) = .076 BETA( 2) = -4.088

SECTION ( 1) LEFT VERTICAL DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.4184	.2356	.2535	.2839	.2086
.025	.2808	.1550	.1977	.1840	.1428
.050	.2542	.1444	.1586	.1605	.1123
.150	.1197	.0637	.0713	.0405	-.0233
.300	-.0167	-.0271	.0000	-.0647	-.1516
.520	-.1877	-.2021	-.2500	-.2876	-.3534
.685	-.3181	-.6058	-.9589	-.8683	-.5602
.775	-.2474	-.3062	-.3916	-.5747	-.4787
.900		-.2572	-.2519	-.3607	-.3127

ALPHA( 4) = .079 BETA( 3) = .002

SECTION ( 1) LEFT VERTICAL DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.4977	.3648	.4182	.3953	.3923
.025	-.1007	-.3247	-.3484	-.3538	-.4515
.050	.0594	-.1091	-.2595	-.3173	-.3908
.150	-.0437	-.1511	-.1302	-.1528	-.1751
.300	-.2053	-.1834	.0000	-.1794	-.2362
.520	-.3091	-.2830	-.3207	-.3442	-.3740
.685	-.3118	-.4804	-.8388	-.6012	-.4632
.775	-.2521	-.3484	-.4711	-.4679	-.2859
.900		-.2522	-.2812	-.3179	-.1776



ARC11-019 IAB1 LVAP(ELHL SEALED) LEFT VERTICAL

(RETV26)

ALPHA( 4) = .084 BETA( 4) = 4.101

SECTION ( 1) LEFT VERTICAL DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.4018	.2495	.2000	.0830	.1496
.025	-.3390	-.7118	-.9371	-.9662	-.8748
.050	-.3171	-.6794	-.9741	-.9745	-.8801
.150	-.2363	-.4542	-.6251	-.8213	-.8475
.300	-.3258	-.4153	.0000	-.6477	-.7444
.520	-.4735	-.4214	-.5327	-.5494	-.5653
.685	-.3420	-.4350	-.5666	-.3986	-.3592
.775	-.2397	-.3259	-.3969	-.2921	-.2762
.900		-.2961	-.2720	-.1804	-.1679

ALPHA( 4) = .089 BETA( 5) = 6.149

SECTION ( 1) LEFT VERTICAL DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.2791	.0973	.0580	-.0875	.0091
.025	-.4578	-.8080	-1.0368	-.9621	-.7723
.050	-.4346	-.8824	-1.0546	-.9841	-.7662
.150	-.5519	-.6502	-.9058	-.9219	-.7533
.300	-.3390	-.5805	.0000	-.7487	-.6461
.520	-.5234	-.5260	-.8252	-.5951	-.5202
.685	-.3990	-.4782	-.5686	-.5088	-.4168
.775	-.2597	-.3942	-.4124	-.4605	-.3734
.900		-.3237	-.2759	-.3784	-.3258

ALPHA( 5) = 2.166 BETA( 1) = -6.124

SECTION ( 1) LEFT VERTICAL DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.6020	.8390	.9250
X/CV					
.000	.2983	.0911	.0692	.1049	.0143
.025	.3631	.2728	.2871	.2605	.2297
.050	.3262	.2317	.2338	.2244	.1761
.150	.1848	.1389	.1252	.0954	.0128
.300	.0503	.0307	.0000	-.0272	-.1272
.520	-.1413	-.1666	-.2262	-.2772	-.3556
.685	-.3338	-.5564	-.6524	-.9064	-.7392
.775	-.2454	-.2825	-.3156	-.4336	-.5069
.900		-.2375	-.2140	-.2473	-.2604

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ARC11-019 IAB1 LVAP(ELHL SEALED) LEFT VERTICAL

(RETV26)

ALPHA0( 5) = 2.174 BETA0( 2) = -2.053

SECTION ( 1) LEFT VERTICAL		DEPENDENT VARIABLE CP				
Z/BV	.1580	.3170	.6020	.8390	.9250	
X/CV						
.000	.4014	.3087	.3349	.3603	.3149	
.025	.0896	-.0567	-.0002	.0127	-.0762	
.050	.1328	.0017	.0213	.0218	-.0428	
.150	.0104	-.0614	-.0248	-.0509	-.1084	
.300	-.1177	-.1189	.0000	-.1254	-.1953	
.520	-.2523	-.2413	-.2846	-.3251	-.3668	
.685	-.2834	-.4778	-.9613	-.7424	-.4507	
.775	-.2254	-.3066	-.3898	-.5060	-.3930	
.900		-.2420	-.2116	-.3346	-.2707	

ALPHA0( 5) = 2.176 BETA0( 3) = 2.058

SECTION ( 1) LEFT VERTICAL		DEPENDENT VARIABLE CP				
Z/BV	.1580	.3170	.6020	.8390	.9250	
X/CV						
.000	.4114	.3079	.2942	.2321	.2597	
.025	-.2340	-.6167	-.7192	-.7767	-.6979	
.050	-.0616	-.5575	-.6967	-.7278	-.6789	
.150	-.1303	-.2928	-.3111	-.3343	-.4760	
.300	-.3073	-.3415	.0000	-.3195	-.3017	
.520	-.4269	-.2837	-.3813	-.3993	-.4008	
.685	-.2997	-.4099	-.6327	-.4882	-.3102	
.775	-.2442	-.3171	-.4397	-.3627	-.2276	
.900		-.2567	-.2660	-.2185	-.1074	

ALPHA0( 5) = 2.176 BETA0( 4) = 6.147

SECTION ( 1) LEFT VERTICAL		DEPENDENT VARIABLE CP				
Z/BV	.1580	.3170	.6020	.8390	.9250	
X/CV						
.000	.2639	.0722	-.0031	-.1432	-.0430	
.025	-.5146	-.8333	-1.0605	-.9609	-.7130	
.050	-.4828	-.9086	-1.0765	-.9798	-.7153	
.150	-.5517	-.6962	-.9279	-.9050	-.7034	
.300	-.3711	-.6076	.0000	-.7552	-.6199	
.520	-.5108	-.4959	-.8187	-.6245	-.5029	
.685	-.3506	-.4272	-.5184	-.5147	-.4062	
.775	-.2499	-.3542	-.3588	-.4632	-.3792	
.900		-.2927	-.2154	-.3740	-.3356	

ARC11-019 IAB1 LVAP(ELHL SEALED) LEFT VERTICAL

(RETV26)

ALPHA0( 6) = 4.242 BETA0 ( 1) = -6.110

SECTION ( 1) LEFT VERTICAL DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .6020 .8390 .9250

X/CV

.000	.2882	.0826	.0355	.0576	-.0248
.025	.3131	.2539	.2678	.2434	.2157
.050	.2815	.2124	.2146	.2080	.1638
.150	.1562	.1163	.1118	.0840	.0037
.300	.0373	.0189	.0000	-.0303	-.1329
.520	-.1411	-.1617	-.2259	-.2831	-.3590
.685	-.3136	-.5357	-.6233	-.9117	-.7168
.775	-.2381	-.2928	-.3092	-.4223	-.5093
.900		-.2361	-.2550	-.2289	-.2425

ALPHA0( 6) = 4.246 BETA0 ( 2) = -4.074

SECTION ( 1) LEFT VERTICAL DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .6020 .8390 .9250

X/CV

.000	.3288	.2032	.1764	.2272	.1405
.025	.2096	.1281	.1783	.1586	.1100
.050	.2005	.1121	.1472	.1328	.0742
.150	.0765	.0316	.0535	.0183	-.0567
.300	-.0533	-.0541	.0000	-.0860	-.1759
.520	-.1975	-.2024	-.2577	-.3201	-.3852
.685	-.3072	-.5235	-.6899	-.8630	-.5284
.775	-.2328	-.2850	-.3555	-.5908	-.4537
.900		-.2308	-.2304	-.1587	-.2254

ALPHA0( 6) = 4.244 BETA0 ( 3) = .001

SECTION ( 1) LEFT VERTICAL DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .6020 .8390 .9250

X/CV

.000	.4447	.3079	.3547	.3232	.3239
.025	-.1387	-.3550	-.3568	-.3594	-.4567
.050	.0139	-.1542	-.2506	-.3386	-.3902
.150	-.0834	-.1737	-.1422	-.1761	-.1992
.300	-.2254	-.2036	.0000	-.2008	-.2540
.520	-.3072	-.2741	-.3355	-.3632	-.3947
.685	-.2709	-.4204	-.6547	-.5990	-.3840
.775	-.2307	-.3162	-.4241	-.4255	-.2750
.900		-.2434	-.2363	-.2262	-.1367

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ARC11-019 IAB1 LVAP(ELHL SEALED) LEFT VERTICAL

(RETV26)

ALPHA0( 6) = 4.243 BETA0 ( 4) = 4.105

SECTION ( 1) LEFT VERTICAL		DEPENDENT VARIABLE CP				
Z/BV	.1580	.3170	.6020	.8390	.9250	
X/CV						
.000	.3318	.1904	.0930	.0147	.0759	
.025	-.3883	-.7623	-.9206	-.7632	-.9009	
.050	-.3299	-.7756	-.9570	-.7496	-.8800	
.150	-.2458	-.5277	-.6981	-.7416	-.8480	
.300	-.3814	-.4635	.0000	-.6743	-.7025	
.520	-.4712	-.3253	-.4098	-.5677	-.4911	
.685	-.2928	-.3136	-.5502	-.3617	-.3116	
.775	-.2211	-.2878	-.3470	-.2836	-.2258	
.900		-.2923	-.1968	-.1929	-.1290	

ALPHA0( 6) = 4.240 BETA0 ( 5) = 6.155

SECTION ( 1) LEFT VERTICAL		DEPENDENT VARIABLE CP				
Z/BV	.1580	.3170	.6020	.8390	.9250	
X/CV						
.000	.2508	.0461	-.0522	-.1999	-.0788	
.025	-.5785	-.8844	-1.0530	-.8471	-.6203	
.050	-.5264	-.9536	-1.0674	-.6615	-.6333	
.150	-.4960	-.7374	-.9067	-.8065	-.6249	
.300	-.4220	-.6177	.0000	-.7180	-.5753	
.520	-.4587	-.4009	-.7085	-.6207	-.4750	
.685	-.2791	-.3207	-.4506	-.5383	-.3953	
.775	-.2384	-.3086	-.2922	-.4727	-.3587	
.900		-.2683	-.1806	-.3755	-.3198	

ALPHA0( 7) = 6.337 BETA0 ( 1) = -4.058

SECTION ( 1) LEFT VERTICAL		DEPENDENT VARIABLE CP				
Z/BV	.1580	.3170	.6020	.8390	.9250	
X/CV						
.000	.3067	.1577	.1622	.1880	.0982	
.025	.1774	.1075	.1694	.1417	.1023	
.050	.1645	.0893	.1345	.1167	.0650	
.150	.0471	.0169	.0514	.0028	-.0692	
.300	-.0719	-.0598	.0000	-.0936	-.1863	
.520	-.2041	-.2014	-.2656	-.3285	-.3849	
.685	-.3033	-.4899	-.6132	-.8615	-.5416	
.775	-.2315	-.2857	-.3339	-.4131	-.4112	
.900		-.2303	-.2132	-.1222	-.1443	

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ARC11-019 IA81 LVAP(ELHL SEALED) LEFT VERTICAL

(RETV26)

ALPHA( 7) = 6.337 BETA( 2) = -2.026

SECTION ( 1) LEFT VERTICAL DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .6020 .8390 .9250

X/CV

.000	.3301	.2382	.3031	.2929	.2534
.025	.0524	-.0684	-.0069	-.0050	-.0790
.050	.0843	-.0270	.0155	-.0008	-.0565
.150	-.0209	-.0756	-.0339	-.0695	-.1251
.300	-.1489	-.1287	.0000	-.1447	-.2101
.520	-.2571	-.2343	-.2935	-.3470	-.3863
.685	-.2773	-.4468	-.7295	-.7400	-.4522
.775	-.2286	-.2862	-.3777	-.5395	-.3786
.900	-.2297	-.2092	-.1812	-.2109	

ALPHA( 7) = 6.335 BETA( 3) = .015

SECTION ( 1) LEFT VERTICAL DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .6020 .8390 .9250

X/CV

.000	.3285	.2573	.3483	.3032	.3011
.025	-.0813	-.3226	-.3669	-.3551	-.4454
.050	.0084	-.1711	-.2434	-.3423	-.3743
.150	-.0749	-.1733	-.1468	-.1790	-.1958
.300	-.1961	-.2017	.0000	-.1995	-.2528
.520	-.2893	-.2828	-.3279	-.3591	-.3952
.685	-.2647	-.3923	-.6551	-.6007	-.3565
.775	-.2298	-.2820	-.3923	-.4362	-.2505
.900	-.2366	-.2082	-.2250	-.1255	

ALPHA( 7) = 6.332 BETA( 4) = 2.074

SECTION ( 1) LEFT VERTICAL DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .6020 .8390 .9250

X/CV

.000	.3209	.2414	.2569	.1673	.1927
.025	-.2220	-.5601	-.6759	-.7145	-.6926
.050	-.1175	-.4901	-.6486	-.6952	-.6686
.150	-.1440	-.2847	-.3225	-.3543	-.4447
.300	-.2610	-.2843	.0000	-.3267	-.3018
.520	-.3246	-.3085	-.3797	-.3915	-.4090
.685	-.2606	-.3551	-.5836	-.4847	-.2544
.775	-.2194	-.2744	-.3702	-.3056	-.1686
.900	-.2464	-.1985	-.1597	-.0725	

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ARC11-019 1A81 LVAP(ELHL SEALED) LEFT VERTICAL

(RETV26)

ALPHA0( 7) = 6.327 BETA0 ( 5) = 4.123

SECTION ( 1) LEFT VERTICAL		DEPENDENT VARIABLE CP				
Z/BV	.1580	.3170	.6020	.8390	.9250	
X/CV						
.000	.2910	.1392	.0757	-.0149	.0284	
.025	-.3926	-.7583	-.7949	-.8052	-.9458	
.050	-.3141	-.7841	-.7714	-.8067	-.9340	
.150	-.2534	-.5080	-.6558	-.6789	-.8682	
.300	-.3642	-.4079	.0000	-.6642	-.6854	
.520	-.3957	-.3124	-.4216	-.5175	-.3386	
.685	-.2648	-.3295	-.5512	-.3161	-.2008	
.775	-.2227	-.2859	-.3280	-.2487	-.1391	
.900		-.2787	-.1817	-.1627	-.0652	